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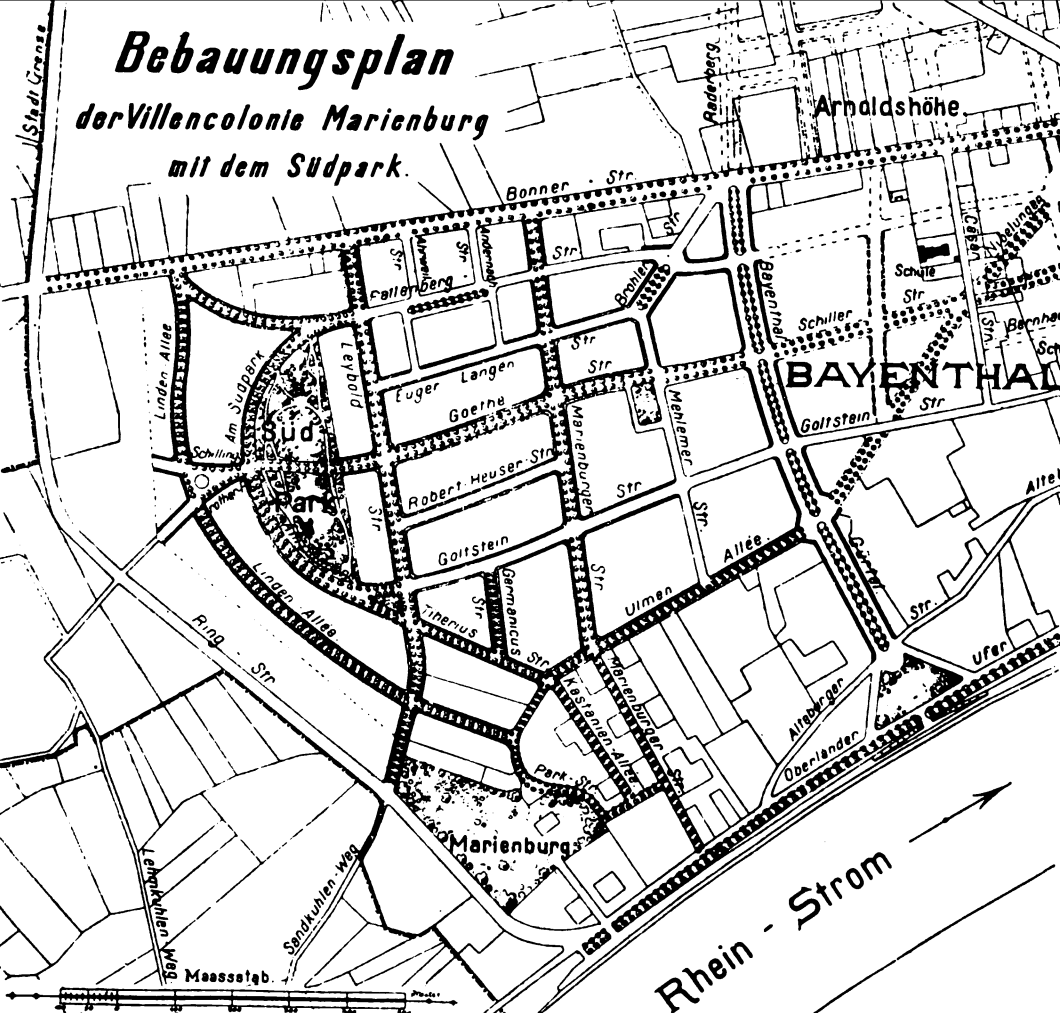
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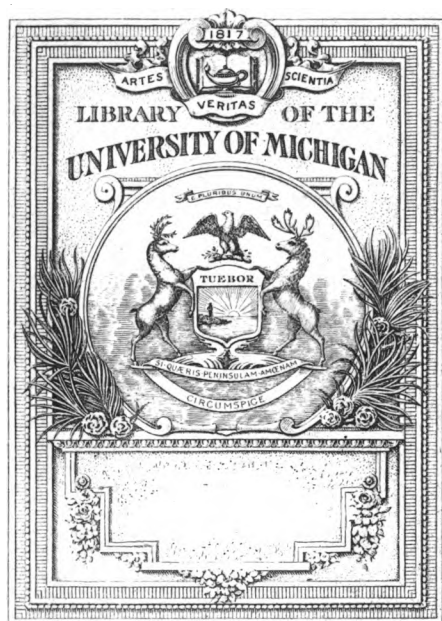
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Housing conditions in manchester and salford

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The Improvement
OF THE
Dwellings and Surroundings
OF THE
People
THE EXAMPLE OF GERMANY

*Supplement to the Report of the Manchester and Salford
Citizens' Association for the Improvement of the
Unwholesome Dwellings and Surroundings of the
People*

COMPILED BY
T. C. ^{Cole}HORSFALL

MANCHESTER
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The opinions expressed in those parts of this Volume
which are not translated, are those of the compiler.

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The Improvement of the Dwellings and Surroundings of the People.

Since the year 1870 there has been a great increase in the population of Germany. Owing to this increase, to the existence in Germany of the same tendency to leave the rural districts for towns which is found in this country and almost all others, and to the rapid development of the German commercial and manufacturing systems, there has been, and is, a very great deal of overcrowding of houses in most German towns, both large and small. As in Germany a very large number of good and able men have for many years past devoted themselves to the task of finding remedies for the evil, it cannot but be useful to consider what are the measures which receive there the most general approval. We therefore purpose to give an account of the proposals made by some of the German Governments in decrees, and of those which are embodied in laws, for dealing with the housing question, and further, an account of what has been done by some of the best managed German towns to supply the need for dwellings.

In considering accounts of action taken in Germany, it is necessary to remember that there are some great differences between the housing problem as it presents itself to us in England and the housing problem with which Germans have to deal. A house may be an unwholesome dwelling for its occupants in one or both of two ways. It may be so defective in respect of construction, or be made so unwholesome by the neglect of its owner, or its occupants, or of both, that, even if its surroundings be perfect, its influence on those who live in it must be bad. Or, even if a house be well-built and be kept in perfectly good order by its owner and its occupants, it may be made

unwholesome by the nature of its surroundings. There are many dwellings, both in England and Germany, which are unwholesome for one or both of these reasons; but Germany has a far larger proportion than England of dwellings which have wholesome environment but are made unwholesome by the nature of their construction, and by other conditions operating inside the dwellings; and England has a far larger proportion than Germany of workmen's dwellings, which, so far as construction is concerned, are potentially wholesome, but which are made unwholesome by the nature of their environment. In England the great majority of workmen's dwellings are still houses intended by their builders for, and occupied by, only one family each. In Germany at one time one-family houses were the most common kind, but now, except in Bremen, the great majority of working people in towns both large and small occupy dwellings, of which each house contains several. The following tables show how great is the difference between the average number of the occupants of one house in England and the average number in one house in Germany. We take the tables from *Die Wohnungsfrage*,* by Dr. Eugen Jaeger.

	Inhabitants		Households	
	1881	1891	1881	1891
London	7·9	7·6	1·7	1·7
Newcastle-on-Tyne ...	7·2	7·3	1·5	1·5
Bristol	6·5	6·3	1·1	1·1
Cardiff	6·8	6·3	1·2	1·2
Liverpool	6·0	5·7	1·2	1·2
Portsmouth	5·6	5·4	1·2	1·2
Manchester	5·1	5·0	1·04	1·04
Birmingham	5·1	5·0	1·04	1·04
Sheffield	5·0	4·8	1·01	1·01
Leeds	4·8	4·7	1·01	1·01
Average	6·3	6·1	1·31	1·31
Without London	5·3	5·2	1·08	1·08

* "Die Wohnungsfrage," von Dr. Eugen Jaeger, Zweiter Band, Verlag der Germania. Berlin 1903. Price 5s. A most useful book.

	1880		1890		1890
Berlin	44·9	.....	52·6	.....	12·3
Breslau	33·2	.....	35·4	.....	8·2
Koenigsberg	27·7	.....	29·5	.....	6·4
Chemnitz	32·1	.....	29·1	.....	6·7
Stettin	30·7	.....	27·6	.....	5·6
Dresden	32·6	.....	27·4	.....	6·3
Magdeburg	26·7	.....	27·4	.....	6·0
Leipzig	38·6	.....	25·4	.....	5·4
Muenchen	19·2	.....	22·4	.....	5·1
Coeln	13·5	.....	13·9	.....	3·0
Bremen	7·1	.....	7·6	.....	2·2

Some idea of the magnitude and importance of the task, which has to be dealt with in connection with the housing question in German towns, may be gained from the following statistics respecting overcrowding, which we quote from the first volume of *Die Wohnungsfrage* by Dr. Eugen Jaeger.

“ Of 1,000 persons, there live in dwellings consisting of only one or two rooms, some of which have no fireplace,

in Berlin	738
„ Breslau	742
„ Dresden	688
„ Frankfurt a.M.	335
„ Hamburg	523
„ Hannover	679
„ Koenigsberg	760
„ Magdeburg	726
„ Mannheim	610
„ Muenchen	524

It is assumed that a dwelling is crowded when, for every room which has a fireplace, there are more than six persons in the dwelling, and for every two rooms with fireplaces there are more than ten persons, then, in the year 1880, of 198,640 dwellings in Berlin 22,890 were crowded. And if we assume that a dwelling is crowded, if there are more than two persons for every room with a fire-place, then more than a third of the population of Berlin lives in crowded dwellings.”

The great difference between the environment of the majority of workmen's houses in English towns and that of the great majority of the houses inhabited by workpeople and persons of all other classes in German towns—in other words, the great superiority of German towns to English towns in respect of pleasantness—is due, we believe, to the fact that municipal government is much more efficient in Germany than in England. Why it is so, and how the superiority causes German towns to be much pleasanter to live in than English towns are, for all who can obtain sufficient house-room and the other necessities of life, is explained in the address on "*Ought Mayors and the Chairmen of Committees of Town Councils to be appointed for long periods of time, and be paid Salaries to enable them to give all their working time to the service of the Community?*" which forms the next section in this volume. Because the evils of overcrowded rooms, and of houses containing many families exist to a far larger extent in Germany than here, they have naturally attracted more attention there than here; and, while the authorities of many of our large towns are quietly allowing the great evil of tall barrack dwellings to be added to all the other causes of feeble health which are already found in our towns, the most intelligent German municipal authorities are doing their utmost to ensure that the building of such houses shall be stopped, and that, as far as possible, the workmen's dwellings provided in future shall be smaller houses containing only a few families each. Hence by the study of German action we may learn by what means we can best prevent the continuance of the growth in our midst of the very great evil of barrack-dwellings, and lessen another great evil which is very common in all, or nearly all towns, and in many country places, the unwholesomeness, due to overcrowding and many other causes, of small dwellings. And as German municipal authorities, while they now recognise that it is a mistake to make only wide, and therefore costly streets in new parts, and in the rebuilt old parts, of towns, are convinced that every house must have a wide, tree-planted street, and a pleasant open space not far from it, we can also learn from their action, and the regulations by which it is

guided, how to remove the chief cause of the unhealthiness of our towns, the unwholesome surroundings of houses, each of which, as a rule, but for those surroundings, would be potentially wholesome.

But, even if some readers believe that not all the accounts here given of a small part of the admirable work which is being done in Germany to improve the housing and environment of the people, contain useful guidance for us, we think that all will agree in believing that the accounts, as a whole, deepen the conviction, which the report on the housing conditions of Manchester must have created, that we in England have far too long neglected a complex of terrible evils, which, if not conquered or greatly mitigated, must soon destroy the national health, and that we must, without delay, attack them with the united powers of the state, the municipality and the private citizen.

OUGHT MAYORS AND THE CHAIRMEN OF COMMITTEES OF TOWN COUNCILS TO BE APPOINTED FOR LONG PERIODS OF TIME, AND BE PAID SALARIES TO ENABLE THEM TO GIVE ALL THEIR TIME TO THE SERVICE OF THE COMMUNITY? *

In order that my reasons for believing that this question ought to be answered affirmatively may be followed, I will explain how I intend to deal with my subject. First of all I will state briefly what appear to me to be the chief tasks which have to be done by Town Councils; then I will say what are the methods by which alone these tasks can be performed; next I will consider in what degree these methods have been adopted, and can be adopted, by Town Councils constituted as English Town Councils now are; and what are the results shown in English towns of the failure to adopt the methods more fully; then what are the results shown in German life in towns of the fuller adoption of the methods; and, lastly, I will try to show not only that the question ought to be answered in the affirma-

* An address given to the Citizens' Association by its President, T. C. Horsfall.

tive, but, also, that there is little reason to suppose that, if it can be put clearly to the community, it will be answered with "No."

By far the most important of the very important tasks which a Town Council ought to do is, that of ensuring that all the persons who are allowed to live in the town controlled by that Council shall live under conditions which are as favourable as possible to the maintenance of physical, mental, and moral health and strength; and, if this can be accomplished, under conditions which shall tend to constantly improve the physical, mental, and moral health of the race; and, consequently, of also ensuring that a larger number of persons than can live in health in the town as a whole, or in any one part of it, shall not be allowed to live there. Another important task for Town Councils is that of doing, as efficiently and economically as possible, all the kinds of work which can only, or can best, be done by the Town Council, and which are necessary for the maintenance or enhancement of the health and wealth of the community. Both these tasks are extremely important, but the first is much more important than the second. And for no other nation in the whole world is that task more important than it is for this country. The Census of 1901 showed that 77 per cent. of the population of England and Wales then lived in towns, and only 23 per cent. in the country; and, therefore, unless good health, physical, mental and moral, is made possible in towns—and it is not possible for a large proportion of the population at present,—the real greatness of this country, and probably its apparent greatness also, must soon be lost.

Some of the conditions, which must be fulfilled if the inhabitants of a town are to have a chance of living in health, are not under the immediate control of a Town Council, and can be influenced directly only in slight degree by its action, though there is hardly one of the chief conditions which is not influenced, directly or indirectly, in some degree by the action or inaction of a Town Council. For example, no town population has a chance of living in good health, physical or moral, unless the average wage earned by the average citizen is high enough to enable him to keep himself, and those who are

dependent upon him for support, in a condition of efficiency; and no town population, however high the average rate of earnings may be, has a chance of living in health unless it is well educated. Town Councils cannot do much directly towards controlling rates of wages, nor can they, at this moment, do much directly towards determining what kind of education shall be received by children in schools. But by their power to control the number, the size and the nature of the dwellings provided for the poorer part of the population, and the width and direction of new streets, the degree in which drinking, gambling and licentiousness, on the one hand, and wholesome forms of recreation on the other, shall be encouraged or discouraged by their action, Town Councils have great power to decide what the average citizen shall be able to get for his wages, that is what shall be the purchasing power of his wages, and what shall be the nature of the education he receives after he leaves the elementary day school. It is, however, only with the conditions which are directly, and almost exclusively, under the control of the Town Council that I must deal at present.

The chief condition which must be fulfilled, if a Town Council is to do the more important of the two tasks which I have indicated, is that the housing of the people shall be rightly regulated and supervised. Experience has proved that it is only private enterprise which can cope with the vast work of supplying the greater part of the immense number of new houses which must be built in and near a town, the population of which is increasing rapidly; but experience has also shown that, without control and guidance and assistance of many kinds from Town Councils, private enterprise does not, and cannot, provide enough new houses; does not place what houses it does supply in right relation to other buildings; and does not supply the kind of house which the community needs; and, further, does not keep the houses which it supplies in good order.

Some of the conditions which must be fulfilled, if a town population is to be well housed, are: All parts of the town must be periodically inspected; houses, which are found to be in such a condition internally that good health is impossible in

them, must be repaired either by the owner or at his cost; and, if they cannot be put into good order, they must be closed. If the different houses which compose groups are so placed in relation to each other that they make each other unwholesome, some must be closed and destroyed, and the cost be as equitably as possible distributed among the respective owners.

Before any destruction of property takes place a plan must be made of the area showing how all the houses to be allowed to remain on it permanently can be supplied with all the conditions necessary for the health of the inhabitants; and all destruction of houses and all other alterations must be made with a view to the eventual attainment of the arrangements shown in the plan.

Those houses which are found to be so overcrowded that, on account of the overcrowding, they are unwholesome, must have their excess of inhabitants remorselessly removed to other houses.

The fulfilment of the conditions which I have mentioned is obviously quite impossible of attainment by human beings who have any sympathy at all with their fellow creatures, unless an ample supply of new houses, at rents within the paying power of the displaced persons, is provided for them in places which are within their reach. The fulfilment, therefore, of the conditions needed to ensure that there shall be an adequate supply of new wholesome houses is the most important of all the subjects which have to be attended to; either in a town which has an increasing population; or in a town which, though its population is not increasing, has congested areas which need to be wholly or partially cleared; or which has a large number of houses which, for any cause, need to be destroyed. It is only on the Continent, and it is chiefly in Germany, as far as I know, that attempts have been made to discover what those conditions are. And in Germany it is recognised by all careful thinkers on the subject that two of the necessary conditions are: (1) that at all times there shall exist very carefully thought-out plans, prepared by the Town Council, for opening out for building as much of the land surrounding the town as will probably be needed to supply sites for houses

and all the other institutions and places needed by the community, for a period of thirty, twenty, or, at least, ten years; and (2) that the Town Council shall be prepared to give to Co-operative and other Building Societies, and, if necessary, also to individuals, who are willing to erect houses of the kinds most needed by the community, loans at a low rate of interest. It is held that too much care cannot be given to ensuring that the building plan shall, as far as possible, provide that the new parts of the town shall not only contain all that is needed for the health, strength, and general welfare of those who will dwell there, but also all that is needed to make good the defects of the other parts of the town. It is held, also, that, while it is desirable that the building plan shall, if possible, be made to comply with the reasonable wishes of the owners of the land surrounding the town, a building plan must in any case be prepared, the arrangements of which all persons shall be compelled to comply with, and in the preparation of which the needs of the whole town, and not the wishes of the owners of the land, must receive most consideration. In preparing the plans the conviction must be acted on that, if a community is to be healthy, it must not only have houses so arranged, and so placed in relation to each other, that they can form wholesome homes for families of good habits; but, too, it must be provided with all those things which only a community can provide, and which are necessary to enable its members to acquire and maintain good habits, and necessary also to give them the cheerfulness, the hopefulness, the belief in the goodness of the world, which are needed to make men and women and children desire to acquire and maintain good habits. Hence all building plans should provide that, while the streets used exclusively for dwellings shall not be so wide as to make houses too costly, there shall be wide tree-planted streets near all the narrower streets, so that all the inhabitants may have a pleasant place for exercise within easy reach; that there shall be an adequate supply also of playgrounds and parks, and that sites shall be left for churches and for schools. The more recently-prepared building plans recognise that it is necessary that, the larger a town becomes, the more open the new outer parts must be, and

the lower the buildings composing them; as, if they are closely covered with buildings, and have high buildings, it is impossible for fresh air to reach the central portions of the town, and impossible also for the poorer inhabitants of the town to reach a district where fresh air can be enjoyed. Hence the best building plans provide that towns shall be divided into building districts, and that, in proportion to its distance from the centre,* each district shall have less of its area covered by building, and shall have lower buildings. In the districts most distant from the centre only buildings of two storeys are generally allowed, while in the centre of the town five-storeyed buildings can be erected. In deciding as to what kinds of building to allow in the various parts of a town, the authorities who prepare the building plan take all the peculiarities of the districts, as well as their respective distances from the centre of the town, into account. For the preparation and enforcement of such building plans it is obviously necessary that a Town Council shall have the power of incorporating the districts adjoining its town, or of calling upon competent authorities controlling those districts to co-operate with it in preparing and enforcing plans.

No one, I think, who knows how slums and semi-slums are now being created just outside our large towns can doubt that every Town Council of a large town must have one of those two powers, if our race is to have any chance of recovering and maintaining health and vigour and a strong belief that life is well worth the living.

But a Town Council needs other powers also. To make the land, which it lays open for building by means of its building plan, accessible to some of the persons who are willing, or must be forced, to leave the central congested parts of the town, it must have large, and easily and cheaply usable powers, of providing, or causing to be provided, cheap and rapid modes of transit,—railways or tram lines or possibly a motor-car service. And the power to make and enforce building plans for land

* An example of a building plan, which divides a town into building districts, will be found opposite p. 146.

belonging to private owners will not suffice to ensure that a town shall have sufficient control of a sufficient amount of land: it is absolutely necessary for the purpose of enabling a Town Council to provide sites for the large number of public institutions which every town needs, and the large number of playgrounds and other open spaces which are urgently required, and also for the very important purpose of making the community as a whole rich enough to be able to provide wider streets, and to carry out public improvements—it is absolutely necessary for these two purposes that the Town Council shall have the power to purchase, without having to make application to Parliament and at reasonable price, as much land in and near the town as it desires to buy.

I must turn now for a moment to the second of the two tasks which I mentioned—the doing as efficiently and economically as possible of all the kinds of work which can only, or can best, be done by the Town Council, and which are necessary for the maintenance or enhancement of the health and wealth of the town community. There are some persons, among whom I must number the writer of the articles on Municipal Socialism, which have recently appeared in *The Times*, who do not see that it is to the interest of every class of the nation, to the interest of the rich as well as of the poor, that healthy life shall be made possible in every part of every town, and that this cannot be done unless Town Councils can obtain large sums of money from other sources than the rates. Only such persons can believe that it is not desirable that all such work as the supplying of gas, water, electricity, tram lines,—work, that is, which from its nature must be a monopoly,—shall be done by, and for the profit of, the community, if its Town Council is willing and able to do it efficiently and honestly.*

* The question, What are the social tasks which ought to be undertaken by Municipal Governments? was most ably discussed by one of the most competent authorities on municipal government in the world, Mr. Adickes, the Oberbürgermeister of Frankfurt a.M., in an address delivered in Dresden on September 2nd, 1903, which, with a very interesting address on the same subject by Mr. Beutler, Oberbürgermeister of Dresden, is published under the title "Die sozialen Aufgaben der deutschen Städte," by Duncker and Humblot,

It is obvious that no Authority which is not very efficient can do either of the two tasks, which I have spoken of, at all well,—can prepare building plans and carry on gigantic businesses successfully; and it is equally obvious that no Authority which is not very honest, as well as very efficient, ought to be entrusted with the power of making building plans, buying land when it desires to do so, or carrying on businesses which involve the spending of hundreds of thousands of pounds.

Much of the cost of the very numerous kinds of work to which I have referred has to be borne by the ratepayers, and the majority of ratepayers are sure not to be willing to allow very costly kinds of work, the expense of which they know they will have to defray, to be undertaken, unless they are convinced that the doing of the work is desirable. It is necessary, therefore, that the leading positions in the Town Council shall be occupied by men who possess the respect of the community, and have, and are willing to use, the power to make the community understand what are the kinds of work needed for the common welfare, and to make all the more thoughtful citizens realise that it is the duty of each to work for the welfare of all. If the occupants of the leading positions in the Town Council are to possess this power they must be able men who have carefully considered what are the needs of a community, and have learnt what are the methods by which the needs can best be supplied; and they must, by long study of their own town, have learnt what are its special needs and have thought out plans for using as fully and efficiently as possible the most appropriate methods for supplying the needs. And if a town is to have its work well done, it must entrust the control of all parts of its work to persons whom it can punish, if they fail to

Leipzig. The price is 2s. Mr. Adickes, who has much knowledge of English municipal government, said, respecting building-plans, "The enforcement of building-plans and the restriction by building regulations of the use of building-land are recognised on all sides as necessary, and a large part of the evils existing in English towns is due to there not having hitherto been building-police regulations, in the German sense of the words, in existence there." The whole of Mr. Adickes' address deserves most careful study.

do the work rightly, and who will receive the reward of public approval if they work honestly and intelligently.

Let us consider whether our system of supplying ourselves with the members of a Town Council, or the system in use in Germany is the better adapted for ensuring that the Town Council shall consist in large degree of able men well qualified to perform the important duties incumbent on the members of such Councils. In our system all members of the Council are elected by the ratepayers for three years, and are unpaid; and the members of the Council elect Aldermen for six years, Chairmen of the various Committees of the Council for a year, and a Mayor for a year; and Aldermen, Chairmen, and Mayor are unpaid. In all large towns the unpaid Mayor is expected to spend a large sum on hospitality. The Chairmen of Committees may be re-elected many times, and, as a rule, an able Chairman is kept in office for many years; but it is possible that he will not be re-elected after one year; and, if he be a Councillor, and not an Alderman, the ratepayers may fail to re-elect him to the Town Council at the close of his three years of service. A Mayor also may, or may not, be re-elected after being in office for a year.

This is a system which is very unlikely to supply a large town with a Town Council able to fulfil the numerous and onerous duties which only the Town Council can deal with. The late Mr. Thompson, who for a long time was the agent of the late Sir W. Cunliffe Brooks, told me that many years ago an association of farmers was formed for the purpose of supplying part of Manchester with milk. For the sake of economy the association did not appoint and pay a permanent manager, but arranged that each of the members should take the management for a week or a month—I forget which—in succession. I hardly need add that the association soon failed. Its arrangement has remained in my memory as the one of all best fitted to ensure failure; but, having regard to the fact that the tasks which a Town Council has to deal with are far greater, far more numerous, and far more complicated than those of any association for the sale of milk, I think that our municipal system is even better adapted to ensure failure than that milk-selling

system. As very few persons who can afford to live elsewhere are willing to live in or near a large manufacturing town, only men who have businesses of their own to attend to, can, as a rule, be elected to our Town Councils; and men who have businesses of their own to attend to, cannot, of course, give all their working time to the supervision of public work; nor can many of them be expected to acquire the accurate knowledge of the technical processes of work, entirely different from that for which they have been trained, which is necessary to make their supervision of public work effective. It must also be remembered that, as a rule, the men who can spare any time from their own businesses and professions for the work of a Town Council are no longer young, and must often lack the power of acquiring new kinds of knowledge and the physical and mental energy which belong to early life, and which are extremely necessary for men who are attempting to attend both to their private businesses and to the vast complex of different kinds of work which is entrusted to the care of a Town Council. As a Mayor has to spend a large amount of money on hospitality during his period of office, he must, as a rule, in the case of a large manufacturing town, be a man possessed of considerable means, no longer young, and still engaged in private business,—that is he must, as a rule, be chosen from a very small class not remarkable for the power of acquiring new ideas and new kinds of knowledge, a power which is absolutely necessary to enable a Mayor to initiate the difficult work of reforming municipal government, and to interest the whole community in the task of social reform. And even if all Mayors had clear ideas respecting the changes needed for the public good, and possessed a large measure of power to influence the public mind and heart, as each of them would know that he would probably hold office only for a year, he would feel that it was useless to form a policy of reform on taking office, as he would not have time to get it adopted. The work which is done, or attempted, by Town Councils is very heavy and very difficult, and much of it is of a kind which causes men who have a strong desire for the public welfare much anxiety and disappointment, and all the work is unpaid. Every person of right feeling, therefore, recognises

that the men who are led by right motives to accept election to Town Councils deserve the warmest gratitude of their fellow citizens. This means that a member of a Town Council who accepts election from motives which are not right, and who neglects the duties which he has undertaken, or acts in ways which are thoroughly wrong, though not punishable by law, cannot have his neglect or wrong-doing dealt with by methods which will be felt by an unconscientious man to involve severe punishment. He may be removed from a Chairmanship, or the ratepayers may refuse to re-elect him, but in either case he only loses an unpaid position. He will, certainly, be blamed by a large number of his fellow citizens, but to an unconscientious man that is probably not severe punishment. Our system fails to create a sense of responsibility of the kind needed by persons apt to neglect duty or apt to act dishonourably.

Yet a very short examination of the work undertaken by the Town Council of Manchester, or of any other large town, will suffice to show that it is so large, so complicated, so difficult, that it employs such a vast number of persons, some of whom are probably dishonest, and many of whom are probably lazy and unintelligent, that, if the conditions needed for the maintenance of the public health are to be created, and if a large amount of money, much of it paid by very poor people, is not to be wasted, the supervision of every kind of the work must be entrusted to men who understand that kind of work, and who know that, if they act dishonourably, or tolerate dishonourable conduct in those whose work they have to superintend, they will lose not only the respect of their fellow-citizens but also good salaries. Let us, for example, look for a moment at the work undertaken by the Electricity Committee of the Manchester Town Council, a Committee whose sometime Chairman, Dr. Bishop, a doctor practising, I believe, in Ancoats, lately resigned his position after a Committee had held an enquiry respecting some charge which had been made against him, and had reported that Dr. Bishop, in their opinion, had had no intention of wronging the community. We know from the wide diffusion of the electric light, and from the multitude of electric trams which we see in Manchester, that the work of the

Electricity Committee must be very great, and, however little we may know about electricity and electrical machinery, we must infer from that knowledge that the only supervision of a large electricity system which can have any real value must be that which is exercised by a man who has had either special training for the work, or has gained knowledge of it from long experience. A mere statement of the money spent by the Electricity Committee of our Town Council, and of the number of persons employed by it, will show that the difference between the results of efficient, and those of inefficient, supervision of the Manchester electricity system, if it could be computed, would amount to many thousands of pounds sterling annually. For the amount of the secured debt in connection with the system on March 31st, this year, was £1,020,444, the net increase for the twelve months ending on that date having been £298,171. 1s. 4d. The amount paid for wages and salaries for the year was £38,691. 4s. 7d. What is to be thought of a system which, for a time, makes a doctor of medicine Chairman of the Committee which has to manage this large and difficult business, and, when he resigns, places another gentleman, whose training has given him no knowledge of electrical machinery, or of business on a large scale, in the responsible position of Chairman? We must be very grateful to these gallant men for their remarkable heroism in accepting so difficult a post; but the system which allows them to feel that no better arrangement can be made must be a bad one.

A statement of the amount paid for a year in salaries and wages by some of the Committees of the Manchester Town Council will give some idea of the magnitude of the scale on which a Town Council works, and of the need of having the most effective system of supervision.

In salaries and wages there was paid in the year ending March 31st, 1902:—

	£	s.	d.
By the Watch Committee	100,241	2	4
„ Sanitary Committee	22,464	6	11
„ Parks and Cemeteries Committee ...	15,086	15	2
„ Public Free Libraries Committee ...	9,182	8	2

By the Paving, Sewering and Highways

Committee	63,354	14	0
„ Cleansing Committee	111,589	9	5
„ Town Hall Committee	29,284	11	10

The total amount paid for salaries and wages by the various Committees for the year was £816,639. 11s. 11d.

No one can feel greater gratitude than I do to the members of the Town Council for their public spirit in accepting places in a system which renders success in efforts to make the community healthy and prosperous so unattainable; and we must all admit that it is wonderful that the work of the community is carried on so well, by so imperfect a system. But no one can deny that the system is extremely faulty, that it not only fails to create the conditions needed for the health and welfare of the mass of the people, but that it also leads to a most serious waste of money, and time, and effort. I am assured that the Electricity Committee have made some very costly mistakes. When the Citizens' Association, of which I am a member, examined some of the workmen's dwellings erected by the Town Council, they found that the work of building had been very badly done, and that some of the houses were barely habitable, and the inspection, which our unfavourable report caused the Council to make, led to the dismissal of two officials. And we all of us remember that very serious faults on the part of men holding important positions in the Manchester Police force remained uncorrected and unpunished for a long time. The system is failing in a very marked way to remove the two forms of overcrowding,—overcrowding of houses with inhabitants, and overcrowding of areas with houses,—which are unquestionably amongst the chief causes of the high death rate and the low standard of life, from which Manchester suffers severely. These evils cannot be removed or much mitigated unless the community has a very large area of land for building on, provided with well-arranged streets and ample supply of open spaces, promptly placed at the command of persons willing to build; and our Town Council is doing nothing towards causing this condition to be complied with. The inability of our English

system to enable a town to obtain land was most convincingly proved by the failure of the Manchester Town Council to purchase Trafford Park. That was a large area, on the side of the town where it was most desirable that the town should possess land for the purpose of protecting from pollution the supply of air brought by the prevalent westerly winds. The estate adjoined the Ship Canal, and in the hands of a Town Council possessed of the power which an efficient Town Council has, or would have no difficulty in obtaining, of completely controlling the quantity and the nature of the roads, the tram-lines, the railways on the estate and between it and the town, and of deciding how each part of the estate should be used, it could not have failed to become extremely valuable, and to be in every way a most desirable possession for the town. An efficient municipal government would, many years before the estate came into the market, have had measures prepared to ensure that, when offered for sale, only Manchester should buy it. The Manchester Town Council, which I am throughout using as a very favourable example of the best kind of Town Council that an English town can have, has no chance whatever of putting an end to the two kinds of overcrowding which are destroying the health of the inhabitants of the town, in the only way in which an end can be put to them, that is, by causing a very large number of wholesome houses to be erected near the town. For a large supply of new houses near the town can be called into existence only by one or more of three methods. Either the Town Council must buy a great deal of land round the town, or it must obtain and use power to make building plans and building regulations for land outside its borders which does not belong to it, or obtain power to compel the authorities of the surrounding district to make such building plans and regulations. The failure of the Town Council to buy Trafford Park proves that it is quite useless to expect that it will buy much land round the town, although the experience of Liverpool, which obtains a large revenue from its estates, shows that it is desirable for towns to possess much land. And the other methods need not be considered. Parliament will certainly not give to Town Councils which show themselves to be unable to lay out wisely

the areas over which they already have power, the power to make, or to compel other Authorities to make, plans for the districts outside towns.

Unless a great change of system is made, we must watch, as patiently as we can, the continuance of the processes now in active operation : the degeneration of a great part of the population of towns under the influence of slums ; and the creation on the outskirts of towns of such slums or semi-slums as we see growing in Gorton, Harpurhey, and Salford. That the result of the maintenance of the existing system will be the destruction of the best qualities of our race seems to me to be certain.

For let us consider the physical condition of the mass of the inhabitants of our large towns, which is the best general test of the fitness for its purpose of a system of government or of a system of education. That condition is very alarming. We are weary of hearing that in the year 1899 in Manchester, where the conditions though probably somewhat more unfavourable to health than those of other large English towns, are not much worse, of rather more than 11,000 men who wished to enlist and thought that they had some chance of being allowed to do so, 8,000 were at once rejected, and that of the 3,000 who were not rejected, only rather more than 1,000 were sent into the army, the remaining 2,000 being sent into the Militia. We many of us try to believe that the state of the population is not so poor as these terrible figures seem to indicate ; we say that it is only the irregularly employed, who are many of them of bad habits and most of them badly fed, who are willing to enlist, and that the great majority of the men who are in regular employment are much more robust and healthy than the classes which supply most of our recruits. I am sorry to say that the results of enquiry do not support these cheerful conclusions. For every young man who is able to believe that he has a chance of being accepted by a recruiting officer, there are several who are so stunted or weakly that they have no chance whatever of being accepted, and never think of offering to enlist ; and, taking the irregularly employed class as a whole, it is probably as, or nearly as, robust and healthy as a large proportion of the regularly employed classes, because, though part, but by no means the

whole, is badly fed, it spends much more time in the open-air and gets far more physical exercise than the members of the regularly employed classes. It is impossible to deny that the physical condition of the people in Manchester and other large English towns is so poor, that even if we had not the additional warning of high death-rates, we should know that unless the conditions of life in our towns can be very greatly improved, great disasters must befall us in the near future. Let me give here a few words of evidence from a foreign observer as to the condition of the inhabitants of Manchester and Salford. Recently Dr. Meyer, the Director of the Royal Zoological Museum in Dresden, visited this country to examine Museums. On his return he wrote reports on what he had seen, chiefly for the information of his colleagues. One of the Museums which he visited was Peel Park Museum, Salford. He says of it: "I received a most unfavourable impression. The whole was blackened with soot and very dirty, and, moreover, on the day of my visit, which was a half-holiday, the Museum was full of a sort of people who, happily, are unknown in German Museums, because in our large towns so degenerate a race is not found." Compare that German opinion, which certainly is not expressed for the sake of giving offence to English people, and which is entirely in agreement with the impressions which I have gained from long acquaintance with German and English towns,—compare that German opinion with the opinion expressed by Major-General Sir Ian Hamilton in a letter which he wrote to me respecting the subject of physical training, a letter from which I am sure he will allow me to quote: "I was more closely connected with the Manchester Regiment than with any other corps during the whole of the war. They served under my command at the battle of Elandslaagte, where they gained great fame, and afterwards, during the siege of Ladysmith, I lived for months actually in the lines of the regiment on the summit of Cæsar's Camp, where I learnt by degrees to look upon the men, as well as the non-commissioned officers and officers, as my personal friends. Since those days, indeed, whenever any good fortune has happened to me, I am sure to get a kind telegram from the sergeants' mess of the regiment. So you see

I can claim some knowledge of your fellow-citizens. Well, you may take it from me that I never met men who showed more grit or resolution whenever they found themselves in a tight corner, but I hope I will not give you, a Manchester man, offence, if I say that their physique was hardly equal to the fine standard of their determination and courage. I have often remarked to other officers that the Manchesters would never be fully appreciated by anyone who had not seen them in difficulty or danger. From one point of view, of course, this may be taken as praise, inasmuch as what is born in us belongs to us more entirely than anything we may acquire, but I cannot but think that it is the fault of someone that these brave and stubborn lads were not at least an inch or two taller and bigger round the chest, and altogether of a more robust and powerful build."

The causes of the degeneration which goes on in our large towns, and of the high death-rate of many of those towns, are very obvious. The main cause is not the overcrowding of dwellings, though that is a very marked and serious evil, nor excessive drinking, nor licentiousness, nor betting and other forms of gambling, nor the cutting off of light by smoke, nor the horrible filthiness of the air, nor the lack of physical exercise, nor any other of the evils which exist in our towns, though each of those which I have mentioned would by itself almost suffice to cause the ruin of the race. The chief cause is that, while all these evils exist, there is nothing to counteract the effect of them, that none of the conditions exist for the majority of the inhabitants of the towns which give strong motives to human beings to resist the temptations found everywhere to drink, to gamble, to be licentious, to give up exercise, to exclude fresh air from one's house, and so on. The chief cause of evil is that the towns lack the pleasantness, which is the most important condition of cheerfulness, hopefulness, physical and mental health and strength for all classes, for the poorest as well as for the richest. This cause, and its effects on physical and moral well-being, have been most tersely and yet fully indicated by Mr. Justice Day, who, speaking of drinking to excess, said: "IT IS THE SHORTEST WAY OUT OF MANCHESTER."

I believe the condition of the district which one traverses in going from Oxford Road to Alexandra Park,—a district much less grimy and miserable than many other parts of Manchester, and not inhabited by the poorest class of our population,—in which one does not see a single tree-planted street or square, or a single building which it is pleasant to look at, and where the inhabitants have nothing offered them by the community that can make them respect their city and feel glad to be alive, is as convincing a proof of the inefficiency of our system of municipal government as is our high death-rate or the pooriness of the physique of the population.

The German system of municipal government has been shaped by the conviction that the work of governing a town is so important and so difficult, that the supervision of it needs the whole of the working time, and all the powers of thought, of able men who have gained knowledge of the needs of the town by long experience of the work of governing towns, and who know that, if they are guilty of neglect of duty, or if they act dishonourably, they will be ruined for life by losing their offices and the salaries on which they live and the confidence of the public, without which they cannot obtain other appointments. The system differs in detail in different parts of Germany, but the same principle is acted on, so far as I have been able to learn, everywhere. The majority of the members of a Town Council are elected by the ratepayers and are unpaid, and the elected members of the Councils appoint the Mayor, and as many other men as are needed to fulfil such duties as in England are entrusted to Chairmen of Committees. The Mayor and the other men so appointed receive salaries. For the purpose of enabling the Town Council to get rid of men who prove to be incompetent, or for any reason unsuitable for the positions in which they have been placed, and at the same time of enabling competent men to know that, when once elected, they will continue in office as long as they retain working power, or till they wish to resign, a very simple and effective method is adopted. The Mayor and the other salaried members of the Corporation, whom I will call Adjoints, are elected for a number of years, which differs in different States, being twelve

in Prussia and nine and six in other parts of Germany. At the end of the first, or any later period of office, the Mayor and the Adjoints can be re-elected or not as the Town Council decides; but if the Council fails to re-elect either the Mayor or any of the Adjoints, it has to pay him a pension, the amount of which varies according to the length of time for which he has served. A Mayor or Adjoint who, after a certain length of service, resigns on account of ill-health, is also entitled to a pension. In Prussia, unless with the approval of the Government some other arrangement is made respecting pension, a man, who is not re-elected when he has served for twelve years, is entitled to a pension of half the amount of the salary he received, and if not re-elected when he has served for twenty-four years, his pension is of two-thirds the amount of his salary. This arrangement gives Town Councils reasons for being very careful to choose for the offices of Mayor and Heads of Committees men who are very competent, and still so young as to be likely to remain competent for many years. The system has given Germany Town Councils of a remarkably high degree of efficiency. Every Mayor and Adjoint knows that he will probably hold office for many years, and that, therefore, it is worth while to think out carefully the policy which he wishes to persuade his colleagues to adopt. And the system is extremely economical. The salaried Mayors and Adjoints supervise all the work of the town very carefully and thus prevent waste; and, as the work of the Mayor and that of every Adjoint is very interesting, and is rightly regarded as very important and very honourable, able men are willing to accept the offices for comparatively low salaries. The difficulty of providing for the needs of town populations now, when in all countries in Western Europe there is an inrush from the country into large towns, is so great that, efficient as is the German system of municipal government, it has not succeeded in preventing some of the same evils from which we suffer severely. The population of nearly all German towns has increased extremely rapidly since the War of 1870, and in the last few years there has been a very rapid and very great growth of manufactures in a great many German towns. It is found

that, as a result of these changes, there is a great deal of overcrowding of houses in nearly all growing German towns; and, as in all large German towns, except Bremen, most houses are tall and contain many families, this overcrowding of adjoining rooms on several storeys is a great evil. But the Town Councils of nearly all German towns are showing far greater energy in combating this evil than our Town Councils are showing, and the methods which they have adopted to remove it, appear much more likely to be successful than the methods adopted by the few English Town Councils which are making serious attempts to lessen overcrowding in their towns. It is, however, chiefly by their remarkable success in making full and healthy life possible in all parts of all towns for those persons, of all classes, who earn enough to be able to obtain an adequate amount of house room, that German Town Councils show that their system is very greatly superior to ours. In many old towns there are still parts where buildings are so close together as to make each building unwholesome; but in nearly all parts which have been built during the last few years, so much care has been taken to have wide streets, to arrange that very wide tree-planted streets shall occur at no great distance from each other among the ordinary streets, that there shall be strips of pleasant garden and larger park-like plots at frequent intervals, that it is no exaggeration to say that in all German towns which are known to me the very poorest parents, in whatever part of the town they live, have far pleasanter places near their homes in which they can seek fresh air and beautiful surroundings for themselves, and space for exercise for their children, than the richest people have who live in any part of Manchester. If we take the physical condition of the inhabitants of a town as an index to the efficiency of the system of municipal government in the case of Germany, as I did in the case of Manchester, then certainly we shall be compelled to say that the German system is far superior to ours. For the inhabitants of the large German towns are far more robust in appearance, and are, on the average, taller and broader, than are the inhabitants of our large towns.

A very important indication and result of the greater efficiency of German town government is the possession by most

German towns of a considerable amount of land.* Dr. Conrad Boetzow, the able author of the report on "The Housing Question in England," which forms part of a volume† published last year by the Verein fuer Socialpolitik, after examining what is being done in this country by the light of his knowledge of continental work, expresses the conviction that we need the adoption of a far-seeing Land and Transport policy by our Local Authorities to enable us to find an answer to the "question"; and he adds: "In this respect our German communities are in a far more fortunate position." In Germany, the possession by Town Councils of much land is known to be so necessary for the public good, and so much confidence is felt in the power and will of Town Councils to use the right of buying land wisely, that two years ago the Prussian Government issued directions to the Governors of the 12 Provinces into which the kingdom is divided, that they should use all their

* In "Soziale Praxis," of December 25th, 1902, information respecting the amount of land held by 31 German towns is given. The list shows how many square metres of land per head of population each town possesses. I give the amounts here in square yards. I do not know if they include land used for parks and shrubberies. Posen has 10 square yards; Barmen, 10·76; Dresden, 14·23; Krefeld, 14·95; Essen, 17·70. Only seven of the thirty-one have less than 23·94 square yards per head. Six—Altona, Charlottenburg, Duesseldorf, Karlsruhe, Chemnitz, Cassel—have from 23·94 to 59·80. Nine towns—Stuttgart, Halle, Duisburg, Berlin, Kiel, Leipzig, Muenchen, Hannover. Koeln.—have from 59·80 to 119·60 square yards. Berlin has 84·91. Five towns—Frankfurt, Mannheim, Breslau, Magdeburg, Dortmund,—have from 119·60 to 239·20 square yards; and four towns—Aachen, Danzig, Stettin, and Strassburg,—have more than 239·20 square yards. Of the 31 towns, Strassburg, which has 364·78 square yards to each inhabitant, holds the largest proportion of land.

Manchester has no land which can be used for any other purpose than that for which it was acquired by the Town Council, but if, for the sake of making a comparison, we suppose that the land in all the public parks, including Heaton Park, were held by the town, as the land referred to in the list is held by the 31 German towns, Manchester would then have 988 acres, or 1·54 square miles, of land which could be used as the Town Council thought best. This would amount to 8·79 square yards for each inhabitant. If Manchester had as much land as the average quantity held by the five towns of the Frankfurt group, which I will take at 150 square yards per head, it would have 16,860 acres, or 26½ square miles, and would not find the task of providing wholesome houses for its inhabitants as difficult as it now finds it. Most of the German towns mentioned in this note are actively increasing their holdings of land. Since 1890, the quantity held by Koeln has increased by 1,269 per cent.; that held by Chemnitz by 605 per cent.; Muenchen's holding has increased by 334 per cent.; Dresden's by 290 per cent.; Mannheim's by 254 per cent. Berlin, notwithstanding its very great increase of population, has added, in the ten years, 21·52 square yards of land per head of its population to its communal holding.

† "Neue Untersuchungen ueber die Wohnungsfrage in Deutschland und im Ausland." Dritter Band, Leipzig, Duncker and Humblot, 1901.

influence to induce all Prussian towns to buy as much land as they could obtain, and to retain possession of all they then held and should afterwards acquire.† Several towns, for many years before receiving this advice from the Government, had steadily purchased land as opportunities occurred. Frankfurt was one of these wise towns, and its experience suffices to prove that the possession of much land brings great advantage to the whole of a community. For in Frankfurt lately there has been a great increase in the number and size of manufactories and "works" of different kinds, and therefore also a great increase in the number of members of the working-class. As private enterprise, unstimulated, did not supply enough wholesome dwellings for workpeople, the Town Council stimulated the supply by offering to let part of the town land to building societies of public utility and private builders on chief rent for terms of about 80 years; and they also offered to lend nine-tenths of the cost of building the houses. As the land belongs to the town, and the houses will also eventually belong to it, the Town Council can safely take the course described. Another town, Halle, pays a quarter of the value of the houses when the lease ends. Several other towns, among them some small towns, have promoted the building of workmen's dwellings by similar use of the land belonging to them, and by lending money on easy terms to building societies.

When I described the conditions which must be fulfilled, if a town population is to be well housed, I was compelled to anticipate part of the statement which I wished to make later respecting the results attained by the German system of municipal government. It is only in Germany, as far as I know, that the great importance has been seen of having a street and building plan prepared for a large area of land round each town by the Town Council, so as to ensure that there shall always be land enough in the market for sites for houses and other buildings, and that persons willing to build may know with certainty what kind of surroundings every site will have.

† See page 36.

Hence when I spoke of the need for a building plan, I had to speak of Germany prematurely. Many, if not most, large German towns have building plans.

To the preparation of these plans many Town Councils give an amount of thought and trouble which fills an Englishman, when he first meets with records of their work, with surprise and with admiration. The whole subject has for years received close study from a large number of able architects and engineers, as well as from members of Town Councils, and several important works dealing with the subject have been published, amongst the best known of which are books by Professor Baumeister of Carlsruhe, and Mr. Stuebben.* These eminent authorities are sometimes employed by Town Councils to revise and improve their building plans, or to prepare new plans. For example, the Town Council of Stuttgart, when preparing in 1901 for a large extension of the town, obtained long and elaborate opinions respecting the engineering and architectural problems involved, from their own Architect and Surveyor of Buildings, from another eminent architect of Stuttgart, and from Professor Baumeister; opinions respecting the hygienic aspect of the work from their Medical Officer of Health and from Professor Nussbaum, of Hanover; an opinion respecting the political-economical aspect of the work from Dr. Rettich, a member of the Town Council; and an opinion as to the artistic aspect from a Committee consisting of four well-known able men. These opinions, with an introduction by the Mayor of Stuttgart, and plans showing the suggestions made by the Town Council and their advisers, were all published in a

*Among the most useful books on the subject are "Stadt-Erweiterungen in Technischer Baupolizeilicher und Wirthschaftlicher Beziehung," von R. Baumeister, Berlin; Ernst und Korn, 1878, price 8s.; "Strassenbau," von R. Baumeister; "Der Staedtebau nach seinen kuenstlerischen Grundsuetzen," von Camillo Sitte, Wien, Carl Graeser; "Staedtebau," von J. Stuebben. "Die Aufstellung und Durchfuehrung von amtlichen Bebaungsplaenen" by A. Abendroth, Berlin: Carl Heymann, 1903, price 3s., is a useful book for English readers, as it describes all the steps which have to be taken by a Municipal Council which resolves to prepare a building-plan to stimulate and guide the growth of a town.

volume* to enable all the citizens, who cared to do so, to study all the proposals.

In the preparation of building plans many large towns have now adopted the principle of building districts. The more distant a district is from the centre of the town and the smaller is the proportion of each site which may be covered with building, and the smaller is the number of storeys allowed. This arrangement has been seen to be so necessary, that the Kingdom of Saxony, by a most valuable Act of Parliament passed in 1900, has made it compulsory for all towns in the kingdom. It is recognised that in the preparation of building plans for towns great attention must be given to so arranging the direction of streets that all dwellings may receive as much sunshine as possible. It is also thought desirable to arrange that factories and other "works" shall be confined to certain districts. Great efforts are now being made to promote the erection of a large number of small houses, especially of "one-family houses" for working people. The insistence on the need for leaving a large proportion of land uncovered in the outer parts of towns is due both to the conviction that it is an arrangement necessary for the health of the inhabitants of all parts of the town, and also to the belief that, by thus making it impossible to house a large number of persons on a given area of land, the price of land is prevented from rising as much as it would do otherwise.

In 1901 the Town Council of Mannheim, now chiefly a manufacturing town, finding it necessary to make very large extensions, after long consultation with Professor Baumeister, employed him to prepare building plans which were adopted by the Council, and must be complied with by all persons who build in or near Mannheim.

As Mannheim is chiefly a manufacturing town and has very carefully considered how it can increase its power to compete successfully with other German and with foreign towns, the arrangements adopted by its Town Council to guide the growth

* Die Stuttgarter Stadterweiterung mit volkswirtschaftlichem, hygienischen und kuenstlerischen Gutachten, Stuttgart, W. Kohlhammer, 1901.

of the town, if compared with the arrangements made by our Town Council to guide the growth of Manchester, will enable us to form an opinion as to whether the German or the English system of municipal government is the more efficient. The description of the building plan for Mannheim, prepared by Professor Baumeister, which is published in Numbers 69, 70, and 71 of the "Centralblatt der Bauverwaltung," shows that the new part of the town will be provided with a remarkably complete system of narrow railways for passenger traffic, and with an equally complete system of railway lines of the ordinary width, leading from goods-stations in all directions, for goods traffic, which will enable every manufactory to load goods on to trucks on its own premises. Carriage, therefore, will be exceptionally cheap in the town. Yet the Town Council, who are thinking so much of economical working, recognise that even their poorest fellow citizens are men and women, whose bodies and minds need wholesome recreation and an abundant supply of fresh air, of light, and of the influence of flowers and trees. The building plan therefore provides for the creation of avenue streets of widths varying from 24 to 43 yards, and Professor Baumeister adds: "Of course care has been taken to provide open spaces, decorative shrubberies, parks, and sites for public buildings." The width of ordinary streets varies from $8\frac{1}{2}$ to $21\frac{1}{2}$ yards.

As I have already said, the cost of the salaried Mayors and Adjoints, who give to German municipal government its great efficiency, is comparatively small. Mannheim, for instance, according to Kuerschner's *Staatshandbuch* for 1902, has an Oberbuergermeister who has been in office since 1891, who is elected for periods of nine years at a time, and who has a salary of only £1,000 a year. Among the other paid members of the Town Council are a Buergermeister, elected for nine years at a time (as are all the salaried members in Mannheim), who has served since 1898, and receives £600 a year; and two Adjoints, who receive respectively £525 and £500. Mannheim has 141,000 inhabitants. Stuttgart, the building plan of which I referred to, with 181,000 inhabitants, has an Oberbuergermeister who has been in office since 1899, who is appointed for life, and

receives a salary of £750, and, with other paid members of the Council, two Adjoints, of whom one has been in office since 1894, is appointed for six years at a time, and has a salary of £460, and the other has been in office since 1899, is appointed for six years at a time, and has a salary of £375. The town of Hamburg, which has a population of 705,738—59,000 less than Manchester and Salford together,—has a larger staff of paid members of its Council than it would otherwise have, because Hamburg is also a State, and the same Council governs both State and City. The Council has 18 paid members, of whom nine must have studied law or finance. The nine thus qualified receive £1,250 a year each; the other nine have salaries of £600. Two Buergermeisters are chosen each year from the nine members who have studied law or finance. The first Buergermeister receives an addition of £250 to his salary of £1,250, and the second an addition of £150.

One very important result of the efficiency and trustworthiness of German Town Councils is that the Councils are allowed to rate sites which have not yet been built on, on the amount for which they could be sold, and thus to keep down the pressure of rates on the poorer part of the population. This system * of rating, which is so urgently needed in this country, was strongly recommended, in 1899, to those German Town Councils which

* The Communal Rating Act of July 14th, 1893, leaves to each Town the decision as to the way in which land shall be rated. When the Prussian Government recommended the adoption of the system of rating land on its selling value, it prepared model by-laws for the guidance of communities which desired to accept its advice. These model by-laws are published in the "Preussisches Verwaltungs-Blatt," of November 4, 1899, copies of which can be obtained from Messrs. Puttkammer & Muehlbrecht, Unter den Linden, Berlin, N.W., at the price of ninepence each. According to the most recent information, nearly 80 towns, large and small, have introduced the new system of rating. It has just been officially announced, according to *Soziale Praxis* of February 11, 1904, that the Government of Hessen has given notice of legislation to substitute for the direct taxes now levied in the Grand Duchy, both for State and Municipal purposes, a tax on the gross value of property and an income-tax. This will be the first legislation which imposes on all the towns and other communities of a whole country the duty of taxing and rating land on its market-value. The system will give to the community in Hessen a larger share of the "unearned increment" than is obtained for it elsewhere.

had not already adopted it, by the Prussian Finance Minister. It has been adopted by Crefeld, Breslau, Aachen, Duesseldorf, Elberfeld, Charlottenburg, Kiel, Wiesbaden, and other towns. Berlin, which has not yet adopted it, is said to be about to do so. It is calculated that the introduction of the system in Halle will have these results:—One owner of building land worth £55,350, who now pays a rate of £1. 14s. a year, will have to pay £137 a year. Another speculator holds land worth £72,300. He pays 13s. a year and will have to pay £179. In Dortmund, a speculator who used to pay 3s. had his rate raised to £50 a year. When the new method of rating was begun in Breslau, in 1900, speculators in land had to pay an increase of rates of £15,250 a year. In Coeln, under the old system there were in one year 2,703 appeals against 21,292 assessments. Under the new system of rating land at its selling value, there were only 174 appeals against 30,000 assessments.

Mr. Fairlie, in his work on "Municipal Administration" (Macmillan, 1901), says of the German system: "The active management of municipal affairs is very largely in the hands of a special class of technically trained officials, who apply scientific administrative methods to a degree unknown in other countries. Yet it is these cities which have advanced farthest in the direction of what is known as "municipal socialism"; not, however, as the result of any political propaganda, but as a gradual development from their own experience."

I have now only to ask whether there is any good reason for our not adopting the system which works so well in Germany. On the ground of cost there cannot be any good reason. If we paid £3,000 a year to the Lord Mayor and £600 a year to the Chairman of each Committee, the annual cost would be about £14,000. But even supposing that the change involved an expenditure on salaries of £20,000, can anyone doubt that, through the much higher degree of efficiency which the new system would give, a city, which now pays £816,639 a year in salaries and wages, would not save many times £20,000 a year, partly by diminished payments, but chiefly by getting far more for its outlay? Would men as good as those who are now willing to be elected to the Town Council be unwilling, if the

Mayor and Chairman of Committees were paid? I believe that, on the contrary, if it were known that the Mayor and Chairmen were in a position to prevent waste and inefficiency, far more of the men, whom it is desirable to have in the Town Council, would be willing to seek election to it. Would the mass of the ratepayers object to the change? I believe that it is obvious to the most intelligent ratepayers of all classes that, only by the introduction of some such system as that which works so well in Germany, can the physical and moral ruin of our race be prevented, and fuller and healthier life be made possible for the majority of townspeople; and that, therefore, proposals for the change, when clearly explained, would soon obtain the approval of a great majority of the ratepayers. I had an opportunity of explaining the German system lately to an audience at Barrow, which consisted chiefly of working men, and my assertion that we ought to adopt a similar system for the government of our towns seemed to meet with the almost unanimous approval of my hearers.

I have assumed that the establishment in this country of the system of appointing Mayors and Chairmen of Committees for long periods of time, and of paying them salaries, would involve the gain by Town Councils of more unfettered power of buying land, and of more power to influence the use made of suburban land, than they now possess. Although the two things would not come at the same moment, I believe my assumption to be sound. For it is so necessary for the welfare of all classes in both town and country that Town Councils shall have those powers, if they can use them intelligently, that, if our system of town government were made more efficient, Town Councils would, I believe, have no difficulty in obtaining much larger powers from Parliament.

I have obtained from the publisher of Mr. Albert Shaw's "Municipal Government in Continental Europe" permission to print the following passages of description of the German system of town government from that interesting and useful book.* It must be remembered that Mr. Shaw examines the system from an American point of view:—

* T. Fisher, Unwin. Price 7s. 6d.

"Municipal councilors in Germany are, as a rule, very excellent citizens. It is considered a high honor to be elected to the Council. Membership is a title of dignity that merchants, professional men, and scholars are usually eager to hold. No salaries are paid to the councilors, and a penalty is attached to refusal to serve if elected. The sentiment toward these positions is much the same in Germany as in Great Britain, though stronger with men of high education in the German than in the British towns" (p. 311).

"In addition to the magistracy and the council, there is in Berlin a body of about seventy-five so-called "citizen-deputies," who are selected by the council for their general fitness to serve as associates on committees charged with the oversight of various municipal interests, such as parks, schools, the care of the poor, and the sanitary services. They have no authority to vote in the council, but they illustrate, at the center of administration, the excellent practice, which is followed throughout the entire ramification of German city government, of enlisting the co-operation of unofficial citizens in managing the ordinary concerns of the community" (p. 313).

"Now the German Magistratsrath is the glorification of the expert chiefs of departments that one finds in the English system. It may be regarded as the fusing into one supreme executive group of these professional and salaried experts and the level-headed old chairmen of council committees. This statement will be the better understood when the structure of the Magistratsrath is still further analysed. The Berlin* magistracy is composed of thirty-four members, including the chief burgomaster (Oberbuergermeister) and his substitute and next in authority, the second burgomaster. Of this body seventeen are salaried, and are appointed for twelve-year terms, and seventeen are unpaid, and are chosen for six-year terms. The salaried men, including the mayor and deputy-mayor, are selected for their expert qualifications exactly as a board of railway directors would make up its staff of general officers. They come from the civil service of other German cities, where

* Berlin had 1,888,848 inhabitants in 1900.

they have made a record, or from the departments of the royal Prussian service, from which the higher salaries paid by the city tempt the best and most ambitious men." (p. 317).

"The mayor or head of the municipality—in some cities called the Oberbuergermeister, and in some simply the Buergermeister—is the general manager of the whole mechanism of administration, and usually the guiding spirit as well in the economic policies of the municipality." (p. 318).

"Duties are so well distributed among the magistrates that there results the highest type of executive efficiency, and the least possible friction or waste of energy. New departments of administration may either be assigned to the portfolios of existing magistrates, or may be provided for by the appointment of additional members. Thus the Magistratsrath is sufficiently flexible to respond to the changing circumstances of a city, and the presence of its unsalaried citizen members keeps it always sufficiently in touch with the spirit of the community. Magistrates and councilors serve together on standing committees." (p. 319).

"Nearly all the cities in Germany, great and small, maintain the plan of a magisterial council composed of paid and unpaid members. In Dresden 14 are paid and 18 are unpaid. The 14 have been very largely drawn from the service of other and smaller cities, while the 18 have been promoted to the magistracy after valuable service in the elected council. Leipsic has 12 paid and 15 unpaid magistrates, Munich 16 and 20 respectively, Breslau 11 and 13, Frankfort 9 and 8, Hanover 8 and 9, Nuremberg 9 and 17, Chemnitz 9 and 16." (p. 320).

"The German city holds itself responsible for the education of all; for the provision of amusement and the means of recreation; for the adaptation of the training of the young to the necessities of gaining a livelihood; for the health of families; for the moral interests of all; for the civilizing of the people; for the promotion of individual thrift; for protection from various misfortunes; for the development of advantages and opportunities in order to promote the industrial and commercial well-being, and incidentally for the supply of common services and the introduction of conveniences." (p. 329).

"The money that is spent in the interest of the common health is applied with such amplitude of scientific knowledge—and such care that every dollar shall count for an end that is in the long run commercially profitable as well as socially salutary,—that the investment is plainly seen to justify the borrowing of the money and the pledging of the municipal credit." (p. 331).

"The burgomaster is actually or virtually a life incumbent, and his magisterial associates who conduct the various departments either hold their places by life tenure or else upon terms practically as permanent. The city council, representing the people's will, is renewed by instalments. The terms are long, and re-elections are so usual that the personnel of the body is transformed very slowly, and nothing like an abrupt or capricious change of policy is ever probable. Consequently it is possible to make long plans, to proceed without haste, to distribute burdens through periods of years, to consult minute economies, and to make an even symmetrical progress that has far more of tangible achievement to show for every half-decade than could be possible under our spasmodic American methods." (p. 332).

"Nothing is hurried, yet nothing seems to lag when once begun. Street systems are rectified; new suburbs are judiciously laid out; here a new water supply, introduced from high sources, employs engineers, architects, and conduit builders. In another city new sewers are in progress, on a plan for the complete and final drainage of the place. River frontages are undergoing magnificent improvement, for purposes of water traffic. Gas-works, electric-plants, market houses, public abattoirs, school buildings, epidemic hospitals, bridges, wharves, subways, or whatever else the expanding requirements of the municipality may ordain,—all are in course of construction by methods that insure the highest utility and greatest permanence. To cite illustrations or to present statistics would introduce an almost endless task. It is enough to say that the German cities have accepted the idea that their appointments must conform to the newly recognized necessities of modern life, and that they are steadily supplying these appointments with masterly administrative and technical ability, and with such

a combination of close economy and generous foresight as no other nation has ever exhibited " (p. 333).

PRUSSIAN DECREES RESPECTING HOUSING.

On the 19th of March, 1901, the Prussian Ministers of Trade and Commerce, of the Interior, of Religion, and of Agriculture, jointly issued decrees on the Housing Question, which were published in the *Reichs- und Staatsanzeiger* of April 4th. The first of the decrees is addressed to the Over-Presidents of the 12 Prussian Provinces. The following sentences occur in it:— "A solution of the great difficulties connected with the housing question can be expected only from the long continued co-operation of the economic and social influences of the community with the legislative and administrative powers of the State, and from a comprehensive treatment of the question by the towns." The Ministers say that, though much has been done already, they believe that the steady stimulating influence of a central organisation is necessary for the due development of the requisite system of work. The Rhenish Society for the Improvement of the Housing System in Duesseldorf is mentioned as an example of what is needed. A similar society, they say, has already been formed in Hessen-Nassau, and the society is well worthy of being imitated in the other Provinces of Prussia. To such societies loans at low rates of interest may be granted on favourable conditions from any provincial funds which may be available, and, where possible, in fixing the amount of loans, the usual limits in relation to the security may be exceeded.

The first decree then deals with the provisions to be made when a large number of workpeople have to be housed in temporary buildings.

The general principles by which action respecting the housing problem should be guided are discussed in the most important of the decrees, which is addressed to the Presidents of the 36 departments.

We translate almost the whole of this important document from *Soziale Praxis* of April 11, 1901.

In many parts of the State, in nearly all large towns, and

in many towns of medium size and in many small towns, especially in industrial districts, great evils exist in some part of the housing system of the poorer classes. All sanitary and all social interests require the abolition of these evils. Although the conditions are such that complete success in this respect can only be attained by comprehensive legislative action by the Government respecting the different departments of administration, it is desirable that, before the legal changes, which are now being prepared, can be completed by Government, all such measures as are made possible by the existing state of the law, should be adopted to alleviate in some degree the evils of the housing system. It is particularly necessary that all such measures as aim at the erection of small, cheap, wholesome dwellings should be taken. Dwellings of the kind would not only directly do something towards supplying a want felt everywhere by the poorer classes, but, indirectly, would make it more possible in the future to take legal action to prevent the use of buildings which are either unfit for habitation or are wrongly used.

1. In many places there are difficulties in the way of providing special dwellings at fixed rents for workmen employed by the State and for Government officials with small salaries. So far as this is the case, the State has recognised that it is its duty to improve the conditions of the housing of such workmen and officials. This recognition is shown by the laws of August 13th, 1895, July 2nd, 1898, August 23rd, 1899, and July 9th, 1900, which deal with the subject of State-aid for the improvement of the housing of workmen and officials employed by the State. In accordance with those laws small dwellings are built for the use of workmen and officials with small salaries employed by the State in all places where the need for dwellings is not supplied by private enterprise, or where rents are too high, or where good houses cannot be bought at reasonable prices.* For the same reason building loans are

* Dr. Ludwig Sinzheimer states in "Die Arbeiterwohnungsfrage" that from 1886 to the end of 1899 Prussia provided about 28,000 dwellings for the workmen and officials with small salaries employed by the State Railways and

made, especially to building societies, from the State funds which are provided by the laws which have been referred to. Many towns, acting as the State has done, have already built small and wholesome dwellings for their workmen and officials with small salaries. But a great deal more than has yet been done must be done by towns. The same considerations which make it a moral obligation for the State to provide dwellings for its workmen and officials hold good for towns in their capacity of employers of labour, and especially for large towns, when an insufficient supply of dwellings exists. You will, therefore, without delay, make a thorough inquiry as to how far this view has been acted on, especially in the larger towns in your district, and you will bring as much influence as possible to bear, either directly or through the superintending authority, on those urban and rural communities which require it, to induce them to provide good and wholesome dwellings at the lowest practicable rents for the workmen and officials with small salaries employed in their service.

It is advisable that, as a rule, the towns themselves should build the houses, either by their own workpeople or by employing contractors. If some towns prefer to create building societies among their officials and workmen, or to give support to societies of the kind which already exist, or to have houses built by societies of public utility, in all these cases care must be taken that the financial support given by the town is sufficient to ensure the erection of a sufficient number of good and suitable dwellings in a reasonable time. Care must also be taken that the dwellings are kept for the purpose for which they are built, and are not wrongly used later as lodging houses. With regard to the restrictions as to the use and sale of houses let, with the option of purchase, by building societies, we refer you to the model lease prepared by the Rhenish Society for the Improvement of the Housing System in Duesseldorf.

by the Ministry of War, and that in the seven years to 1900 the Prussian Ministry of Agriculture, State-lands, and Forests, by loans of money to building societies, caused 1,200 workmen's dwellings to be built in country places.

2. Towns will promote the provision of an increased supply of small, wholesome, cheap dwellings for the poorer classes, if, whenever the housing conditions are unsatisfactory, they give as much support as possible to building societies "of public utility." It should be a condition for receiving help from the community, that, without regard to the particular legal form chosen by them, the building societies are bound by their articles of association to seek the one object of providing, in houses built or bought by them, wholesome and suitably arranged dwellings for families of the poorer classes, at low rents; that the dividends payable to the members be restricted to not more than 4 per cent. on the amount of their shares, and that, in case of liquidation, not more than the nominal amount of the shares be payable to the shareholders, any surplus being used for public purposes.

It should also be considered how far, and under what conditions, the same help which is granted to building societies of public utility may be given to persons who undertake to erect small, wholesome, and properly arranged dwellings to be let at low rents.

Next it is a question whether building societies should be helped by remitting in their favour part or the whole of the cost of streets and sewers, and by allowing them to defer for a considerable time payment of the sums they owe. It is desirable that the decision arrived at respecting this subject shall provide that any payments which are remitted shall become due, and shall be enforced, if the dwellings are ever used for purposes other than that for which they were first intended, and that this obligation be legally recorded against the sites. The remission of the fees usually paid by builders to the Building-police is also a desirable form of assistance.

Towns can, further, give important aid to building societies by placing at their disposal without charge the co-operation of the building officials of the town. As it is a matter of experience that workmen's building societies can, as a rule, obtain but little capital, the chief way in which such societies can be helped is by the towns' taking some of their shares, and making it as easy as possible for them to obtain loans on mortgage

cheaply, and on terms as favourable as possible in respect of repayment. So far as other funds are not available, or are not provided by the Town Councils, the surplus funds of the communal Savings-banks can be used for this purpose with peculiar propriety.

Even if a town is not in a position to pay for shares with its own funds, or to lend money of its own to building societies, it can easily give them facilities for obtaining capital, by itself borrowing money for them from the National Insurance Institutions on the security of its own credit. The National Insurance Institutions often give very favourable terms to the agents who effect loans to building societies, so that the town, even if add $\frac{1}{4}$ per cent to the rate of interest to cover any loss which may occur, can yet supply the need of building societies for loans on the security of their land at low rates of interest. Further, a town can help a building society to obtain loans by becoming security for them, as many Rhenish towns have done. In these cases some Insurance Institutions lend amounts which considerably exceed the usual limits.

Lastly, for the purpose of aiding building societies, a town may, under certain circumstances, sell them some of its land at a low price and allow them considerable delay in the payment for it.

3. A further means, by which an improvement of the conditions of housing can now be obtained, is to make communication with the outlying parts of towns easier. Wherever, therefore, housing conditions are unsatisfactory, care should be taken to effect an adequate development of the system of communication in the town, and especially at the same time to give as many facilities as possible for the transit of workpeople and school children to and from the outskirts of the town. When the towns grant new concessions for street-railways, tramways, etc., explicit conditions for securing these objects must be included in the agreement.

4. Lastly, a suitable land-policy for towns is of very great importance in relation to the improvement of housing conditions. The evils which at present prevail have their chief source

in unhealthy speculation in land, part of which, it must be admitted, cannot be combated until an alteration is effected in our laws. But even now an effective means for keeping it within bounds can be found in the acquisition of as many plots of land as possible by those towns, whose constant growth is transforming agricultural and garden land, in ever increasing quantity, into building land. In what way the plots of land, which, as a rule, should be always retained as the property of the town, shall be utilised for building purposes, whether the town should itself, or by the employment of contractors, build dwellings on the land and then let them, or let them on chief rent, or cause dwellings to be built by letting the land on chief rent, these are all questions which can be left for the consideration of the towns. It will certainly be in conformity with a sound land-policy, if even towns, in which a house-famine exists, do not sell outright those parts of the land they own which are suitable sites for cheap dwellings. The sale of plots of land belonging to a town may very well have for a time the effect of causing more dwellings to be built and to be offered at lower rents, but in the long run it only promotes speculation in land. The complete sale of land belonging to a town, as sites for small dwellings, is only advisable if the community has the right of pre-emption, or if in some other way adequate security is obtained that the plots of land will be permanently withdrawn from private speculation. In this connection we refer especially to the action of those building societies and building unions "of public utility" which only let houses, and will not sell them, and to the provision of restricting covenants, for the protection of the public interest, in the model lease, prepared by the Rhenish Union for the Improvement of Workmen's Dwellings for cases in which dwellings are let by it and the tenants have the option of purchase.

We beg you to use your own influence, and to cause the supervising authorities to use their influence, continuously with the towns of your district, with vigour commensurate with the importance of the subject in relation to health and moral and social welfare, respecting the measures mentioned under headings 2 to 4. The measures discussed under No. 2 apply in part

to the "Kreise,"* especially the aiding of building societies and building unions "of public utility" by helping them to obtain capital and by letting them have the advice and co-operation of the public building-officials without charge. You will therefore see that what is necessary in this connection is done. We beg you to advocate the course described under No. 4 in the Bezirks† Committee in cases where consent is asked for sales of land belonging to towns, and to explain the subject to the District Presidents in order that they may take similar action in the District Committees in cases where consent is sought for sales of land by country communities.

You will please report to us the result of your endeavours on the 1st March next year.

The Editor of *Soziale Praxis* comments thus on the decree:—"The measures recommended represent the essential part of the task in relation to a dwellings policy which the State imposes on towns. They are all approved often-used means, from the systematic employment of which a mitigation of the house famine may be expected in very many places, if the Provincial Presidents are successful in overcoming the resistance of the owners of land and houses who dominate many Town Councils. But we miss in the list of proposed measures two which are of great importance: the issue of building regulations to keep speculation and the raising of rents within limits, and the creation of systems of inspection of dwellings which shall permanently attend to the observance of the laws of health in dwellings. It is possible that the State reserves both these tasks for itself, and will include them in that comprehensive legislative procedure, promised at the beginning of the decree to the Presidents, which is now being prepared. . . . To-day we content ourselves with the expression of our lively satisfaction that in Prussia the dwellings question has been taken from the stage of consideration into the domain of action, and we can only hope that the stimulus now given will be received everywhere with

* The 465 districts into which Prussia is divided.

† There are 35 Bezirke in Prussia.

intelligence and will find energetic execution. The legislative measures promised by the Government will now be awaited with increased interest.

Speaking in 1892 in the Prussian House of Representatives on the draft of the Prussian Dwellings Law which is referred to in the decrees, the Minister of Finance said with reference to the way in which towns have hitherto been built: "Everywhere equally wide streets have been made, whether they were intended for the use of the well-to-do classes, whether they are in a district of heavy traffic, or whether they are in the less busy parts of the town in which, naturally, workmen seek a home. By thus making wide streets, everywhere the possibility has been created, as our building regulations allow a house to be as high as the street is wide, of erecting tall barrack-like houses everywhere. And the spaces between streets have been made far too great and thus back-buildings have been artificially called into existence. In preparing a rational town building plan our task will be to avoid these faults, and to take as our aim that narrow as well as wide streets shall be laid out, which will cost less to make, and especially that plots for buildings shall be less deep, so that vast dwelling-houses may be avoided."

PRUSSIAN DWELLINGS BILL.

The following extracts from the draft of the long-expected Dwellings Bill for the Kingdom of Prussia, which is referred to in the foregoing decrees, have been published lately by the *Koelnische Zeitung* and have been reproduced by the *Zeitschrift fuer Wohnungswesen* of July 10th, 1903, from which we translate them: "To prevent the prices of land in and near towns from being raised through town extension plans not being prepared early enough, the local Police Authority must have the right to demand that building-lines shall be decided on, and that streets or parts of streets shall be constructed. In the preparation of building-lines care must be taken that squares, sufficiently numerous and large, and public gardens and playgrounds are provided for, that building land, in

quantity corresponding to the need for dwellings, is opened out, and that, for dwellings, narrow streets and building sites of little depth are created. According to the law of July 2, 1875, a building-line which recedes from the line of the street may be allowed. In order that, in the preparation of building plans for towns, more consideration may be given, than has hitherto been given, to the needs of general traffic and to those of neighbouring places, a building plan must receive the approval of the President of the District before it is published."

Of great importance are the provisions respecting the ways in which sites may be built on, and respecting the powers of the Police Authorities to limit by building regulations the degree in which sites may be covered with buildings. According to the draft, building regulations can prescribe that in different zones or districts the number of storeys allowed and the proportion of the sites which can be covered may be different. Districts or streets, separated from "residential" streets and districts, may be set apart for the erection of works likely to cause danger, injury or annoyance to neighbours or the public by the production of noxious vapours, dense smoke, or unusual noise. The plastering, painting and pointing of buildings in streets, and proceedings against buildings which disfigure streets or public squares, will be dealt with by the new law.

For the purpose of inducing private builders to erect houses containing wholesome and well arranged small dwellings, it is proposed to reduce the amount payable in respect of such houses towards the cost of street-making, and at the same time to remove the existing uncertainty respecting the legality of remitting, in respect of such houses, the charges for sewerage, water-supply, land-tax, etc. It is proposed that only a part of such charges, and in no case more than three-quarters of the normal amount, shall be paid by the owners of buildings which are chiefly intended to provide wholesome and suitably arranged dwellings for families of the poorer classes. As buildings of this kind shall be considered those belonging to joint stock companies, associations, and companies with limited liability, the sole registered object of which is of the kind

indicated, and the articles of association of which limit the annual dividend payable to the members to not more than four per cent. on the amount of their shares. To the same class belong dwellings owned by workmen and artisans and other persons of the working classes, if the dwellings are exclusively occupied by the owners, or by them and, at most, two other families of the same class.

As further means for promoting the provision of wholesome small dwellings for the poorer classes there will be regulations respecting the use of dwellings both during the day and in the night. For towns of more than 10,000 inhabitants general regulations of the kind must be issued by the police authorities, and they may be issued for smaller towns. For the regulations the following conditions must be taken as the minimum to be attained: Only rooms which are approved of by the Police Authority as fit for continuous occupation by human beings may be used as sitting-rooms kitchens or bedrooms. In the case of dwellings let to tenants, whose tenancy begins at a date subsequent to that of the publication of the regulations, or whose tenancy is prolonged after that date, no part of the dwelling must be in bad repair, and each dwelling must have a separate entrance. In sitting-rooms and bedrooms there must be for every occupant who is more than 10 years old at least 13 cubic yards of air space and four and three-quarter square yards of floor space. The dwelling must contain so many rooms that all unmarried persons who are above 14 years of age may sleep in rooms in which there is no person of the other sex, and that every married couple may have a separate sleeping-room for themselves and those of their children who are under 14 years of age. If persons owning or renting a dwelling sublet any part of it, they must retain enough of it for themselves to enable the just-mentioned conditions to be fulfilled. Bedrooms of servants and employees must contain at least 13 cubic yards of air space and four and three-quarter square yards of floor space for each occupant, and must also fulfil the conditions respecting furniture, fittings and maintenance which are to form part of the published regulations. Lodgers may not be taken unless their rooms are separated

from those of the tenants, either structurally or in some other fitting way, which prevents direct communication.

The draft lastly contains a series of regulations respecting the carrying out of the inspection of dwellings, which is made a duty of the town. For towns of 100,000 and more inhabitants a Dwellings-Office must be established to take charge of the work of inspection, and the Office must have the necessary staff of properly-trained officials, especially a sufficient number of inspectors of dwellings. The formation of such Offices may be ordered in smaller towns, and several towns can join in maintaining one such Office. The inspectors of dwellings are empowered in the discharge of their duties to enter all rooms intended for continuous occupation by human beings, as well as all the offices, passages, privies, etc., connected with them. If the inspectors discover defects, they must first of all try by advice, instruction, and request to get the defects made good. If these means fail, the police are to be instructed to take action. Special Chief-inspectors of Dwellings are to be appointed, according to the degree of the existing need, to assist the various Presidents of Departments and the Over-presidents, and it will be their duty to superintend the inspection of dwellings in the towns.

THE HOUSING LEGISLATION OF THE GRAND DUCHY OF HESSEN.

The Grand Duchy of Hessen is remarkable for the legislative and other measures which it has adopted for the improvement of the housing of its working classes. It was the first German State to introduce the systematic inspection of dwellings, a step which it took in 1893. This system has led to an increase of dwellings with three bed-rooms and to a decrease in the number of those with only two. Of the power given to communities in Hessen in 1893 to improve dwellings, Offenbach has made large use. Its death-rate has been reduced since 1894 from 19 per thousand to 17 per thousand. By a law passed on August 7th, 1902, Hessen imposes on its constituent towns and other communities the duty of seeing that there is an adequate supply of dwellings for working people; and, for the supply of money to

cover the greater part of the cost of building such dwellings, it has founded a National Credit-bank. The State does not pay money to the communities, but gives them credit. The communities can either themselves build, receiving the full cost of land and building, or make loans to building societies to the extent of 90 per cent. of the total cost of dwellings. Any dwelling, built by help of money thus lent, which is not used in accordance with the conditions attached to the loan, can be expropriated by the town.

The Hessian legislation of the year 1902 included an Act dealing with Public Savings Banks, an Act to create a Mortgage Bank, an Act dealing with the National Credit Bank, and an Act for the provision of Dwellings for the Poorer Classes. All four acts are closely connected with each other, and have as one of their chief objects the provision of wholesome and cheap houses with pleasant and wholesome environment. In a work * on this group of acts Herr Braun, President of the Department of Agriculture, Commerce and Manufactures in the Hessian Ministry, says that "when the Committee which prepared the Bill on Housing had gained the conviction that the housing question in relation to the poorer classes is a land question and a credit question, there could be no doubt that the State and the towns must be asked to help in dealing with it, as apparently it was only in that way that the object sought could be gained. For it is the first condition of success that land which is necessary and suitable for the erection of houses for working people, both in town and country, shall be secured by timely and quick action. Rents in right relation with the means of the poorer classes can be ensured only if sites suitable for workpeople's houses, and the houses on the sites, are taken for all time out of the reach of speculation. In many cases the erection of a single house, at a comparatively great distance from sites with which speculation is possible, suffices to cause

* Die wirtschaftspolitische Gesetzgebung des Grossherzogtums Hessen im Jahre 1902, auf Grund der amtlichen Materialien herausgegeben von Ministerialrat Braun, Darmstadt, Verlag der A. Bergstraesser'schen Hofbuchhandlung, 1902.

a great increase in the price of neighbouring sites, and this increase cannot fail to raise rents. The early purchase of land in all parts of the country must therefore be regarded as the first duty of towns, rural communities, and societies of public utility. Encouragement to take this course ought to be given, especially by the offer of a large measure of help by the State."

It is interesting to note that the Hessian Ministry, in considering how best to deal with the housing question in their own land, studied the legislation of France, Belgium, Denmark and England, and that a translation of the English Housing Act of 1899 was used. The new law does not give additional powers to expropriate land to be used for the building of workmen's dwellings, as the Government considered that the Expropriation Law already in force gives sufficient power for the purpose.

Under the new law, towns, in which there is an insufficient supply of wholesome cheap dwellings, and the town councils of which decline to build, can be compelled to accept a loan from the Bank, and to lend the money so obtained to a building society "of public utility," if such a society exists, and is willing to build, and desires to obtain a loan.

NATIONAL INSPECTORATE OF DWELLINGS.

The same most useful law also creates a National Inspectorate of Dwellings for the purpose of ascertaining, in co-operation with the authorities of the State and those of the various communities, what are the housing conditions, in relation to health and morals, of the poorer classes of the people, and of working, in common with the Hessian Central Union for the Erection of Cheap Dwellings, and with the building societies of public utility of the country, for the removal of the evils which may be discovered.

By a decree of February 24th, 1903, the duties of the National Inspector of Dwellings are thus defined:—

1. To promote, especially by using influence with employers and workpeople, with communities and communal associations, the building of wholesome and cheap dwellings for the poorer

classes in town and country, and to aid the persons mentioned, as well as associations of public utility and other interested persons, by advice and assistance in all efforts made for the improvement of the housing conditions of the poorer classes.

2. To suggest, and promote the formation of, building societies of public utility or of other associations intended to build dwellings for the common good.

3. To examine, and express an opinion respecting, requests for loans from the National Credit Bank, based on the Law for the Provision of Dwellings.

4. To take part in the supervision of the expenditure of such loans, and in seeing that the legal conditions and agreements entered into respecting them are fulfilled.

5. To give evidence as an expert in legal proceedings taken against communities to compel them to provide dwellings.

6. To obtain statistical information respecting all parts of the Housing Question, and to make annual reports respecting these subjects, and respecting his own work.

The National Inspector of Dwellings must further aid all communities with advice respecting the establishment of an efficient local system of inspection of dwellings. Every effort must be made to create such a system in all the larger towns. The most suitable persons for the position of Inspector of Dwellings are those who possess the requisite technical knowledge—doctors, architects, etc. Subordinate members of the police force must not be appointed except in small places and in exceptional circumstances.

The Government indicates the towns and the large communal unions as the fittest organs to undertake the task of the improvement of the housing of the poorer classes. Before themselves taking action, they should aid that of the building societies by placing the services of their building officials at the disposal of the societies without charge, by taking shares in the societies, by granting them favourable terms respecting interest on, and repayment of, the loans made

to the societies, and by granting them loans without mortgage security. Further, it is recommended that the towns shall let the building societies have building land on low terms, either as freehold, or on chief rent for a term of years, and that the usual contributions towards the cost of street-making and sewerage be remitted to building societies.

The passing of the new Housing Law, and the appointment of the National Inspector of Dwellings, have caused very great activity respecting the housing question to exist in nearly all parts of the Grand Duchy of Hessen. The National Inspector, who acts as Secretary to the Hessian Central Union for the Erection of Cheap Dwellings, in a speech delivered at a meeting of the Union of Rhenish Building Societies at Elberfeld on May 15th, 1903, made an important proposal for the foundation of Mortgage Banks, one of the chief purposes of which should be to lend money to building societies of public utility. At a meeting of the Committee of the Hessian Central Union for the Erection of Cheap Dwellings he reported that a considerable amount of building plans, estimates of cost, rules, agreements for purchase and for letting, and of books, had already been accumulated; that, with the aid of the Committee, building societies of public utility had already been formed in three towns, and that in many other towns steps were being taken to form such societies; that in all cases town councils were invited to take part in the formation of the societies, and that so far the invitations had been complied with; and that the Infirmary Insurance Institution was working cordially hand in hand with the Union. Owing to the increase in the number of requests for rules for building societies a committee was appointed at the meeting to prepare a set of model rules.

In the formation of new building societies public-spirited persons of all classes, manufacturers, public officials, clergymen, and teachers, are taking part. A society of public utility is one, the members of which are prevented by the articles of association from receiving more than four per cent. interest on their shares and, in the case of the winding-up of the society, more than the amount of capital originally invested.

THE GENERAL BUILDING LAW OF THE KINGDOM OF SAXONY.

The provisions for the improvement of the housing of the working classes contained in the General Building Law for the Kingdom of Saxony of July 1st, 1900, deserve careful consideration. They are accompanied by most useful provisions respecting the laying-out and enlargement of towns. As the way in which the whole subject was dealt with by the Saxon Parliament contrasts most favourably with the way in which the British Parliament deals with the subjects, respecting which it legislates, we think it may be useful to give some account of the course taken by the Saxon authorities, as well as of the provisions of the Building Law.

When the Saxon Ministry had become convinced that new legislation respecting the housing of the people was needed, it prepared a draft showing the general principles to which it proposed to give effect; and it submitted the draft to various public bodies, which included the National Medical College, the Fire Insurance Chamber, the chief authorities of the governmental divisions of the kingdom, and a considerable number of the State and municipal superintendents of building; and it carefully considered the opinions expressed by these bodies. And in 1899, at the request of the Saxon Parliament, the Ministry submitted the draft to a large Committee of State officials, architects, doctors, agriculturalists and others, at whose meetings a Minister of State presided. By this Committee the draft was discussed for three days. It was also submitted to the Union of Saxon Engineers and Architects, who made various suggestions and criticisms, many of which were accepted by the Ministry. In September, 1899, the draft was revised by a small Committee, which contained, besides representatives of the Government, an architect, a medical man, members of the Dresden Town Council, and a landowner. The draft was then laid before the Second Chamber of the Saxon Parliament, by which it was most cordially received, and, after very careful discussion in 13 sittings, it was passed by a unanimous vote. The First Chamber, which also subjected the Bill to long and thorough

examination, likewise passed the last reading by a unanimous vote.

In an edition* of the Housing Law prepared by Dr. A. Rumpelt, a member of the Saxon Ministry of the Interior, extracts are quoted from the Introduction, giving reasons for the Act, which is generally published with a German Bill, and from the speeches of leading members of the Chambers. From these we translate some passages:—

“The Building Police had formerly only to ensure stability of construction and protection against fire. Later its duties were extended to include attention to traffic and sanitary considerations. In recent times, and chiefly in consequence of the vast growth of towns, it has come to be regarded as an important part of municipal administration, and has been brought into the necessary connection with the great question of housing reform.”

“One of the chief intentions of the law is to give as much freedom in building as is compatible with the rights which need protection, and with well founded interests; or, as it is expressed in another place, the law is intended to give as free play as possible to local and individual wishes and tastes, as well as to the further development of building technique; and to impose limits only where these are needed to protect health and give security from danger, to guard traffic, and to prevent that excessive use of building ground which encourages unsound speculation in land and buildings, *e.g.*, to prevent the construction of unnecessary barrack-dwellings.”

For the purpose of carrying out these intentions the new law effects a considerable relaxation in the regulations hitherto in force respecting the solidity, and the safety from fire, of buildings; it pays more attention to the conditions peculiar to different localities; and it makes greater demands, at least in the larger and more populous places, in respect of the protection of the health and welfare of the community.

*Allgemeines Baugesetz fuer das Koenigreich Sachsen vom 1. July, 1900. Handausgabe, im amtlichen Auftrage veranstaltet von Dr. A. Rumpelt, Leipzig, Rossberg und Berger, 1902. Price 5 Marks.

Before all, it individualises. There is an essential difference between the case of the man who wishes to build a house for his own use and that of a man who wishes to build a house, and especially a barrack dwelling, for the purpose of letting it.

“He who builds a house for himself can safely have almost complete freedom granted to him,” truly says Mr. Stuebben, the eminent architect. “Care for himself will, as a rule, have more effect than all the care that the police can give. . . . The application of the whole army of regulations, which are needed in the case of a vast barrack dwelling-house, to the small dwelling-house, and especially to a house which will be occupied by only a single family, is aimless and unjustifiable. In such a case police regulations do harm and tend to the production of barrack dwellings.”

The State has every reason to help even members of the poorer classes to buy houses of their own, as the well proved experience, that the settled population is one of the chief supports of the existing political and social order of things, is especially true of those who have land and house of their own.

The new law will also promote the building of small dwellings by its provisions that, in deciding what shall be the contributions made towards the cost of streets, squares, bridges, sewers, etc., in respect of a building, not only the length of the site touching the road, but also the kind of building, the area of the ground covered by it, the number of storeys, and the number of dwellings contained in the building, shall all be taken into account; and that the amount of other public charges shall be regulated in accordance with the size of the buildings. The erection of houses in small and poor places is facilitated by giving the police general power to leave unenforced there some of the regulations which are intended for larger and richer localities.

With regard to barrack dwellings the Building Police must take action for the protection of the community. Their demands in the interest of stability, of safety from fire, and of wholesomeness, must be greater in the case of such buildings, and must increase in proportion to the number of storeys.

Regard for the health and social welfare of the community requires that too large a proportion of the land shall not be covered by buildings; and that, at least in country places and in the outer districts of towns, an open mode of building, suitable for such places, shall be adhered to.

Not only in the regulations which apply directly to buildings is the intention shown to ensure, without making excessive demands respecting the width of street, the choice of building materials and the like, that dwellings shall be wholesome and suitable. The law also seeks to ensure that new areas of land shall be opened up for building by the preparation of building and town-extension plans, that obstacles to building shall be removed by the consolidation and redistribution of sites, and that the rebuilding of unwholesome parts of towns shall be facilitated by the expropriation of considerable areas of land.

If in this matter the thing chiefly sought is to make it possible to provide cheap dwellings for the poorer classes, something is done to satisfy this need by the measures which have been mentioned. But it is also necessary to counteract those efforts which, in spite of all facilities which can be granted with regard to building, make it certain beforehand that building shall not be cheap. These efforts are unwholesome forms of speculation in buildings and land. Comparatively few persons know in what an unheard-of-way the prices of building land have been raised artificially, not merely in large towns, but also in those country districts which feel the influence of large towns. For example, the authorities of part of Dresden report that for land of almost the same value as that for which the Town Council paid only from 2s. to 3s. a square metre at the beginning of 1897, it had in September of the same year to pay from 9s. to 10s. per square metre. The following statement gives the prices paid for the purchase of plots of land of considerable size at Plauen, and the prices charged by the purchaser soon afterwards for small plots of the same land:—

Case A.—1897, paid 3s. 8d. per square metre; 1899, charged 14s. 5d. per square metre.

Case B.—1896, paid 6s. 1d. per square metre; 1897, charged 12s. 1d. per square metre.

Case C.—1897, paid 1s. 3d. per square metre; 1900, charged 15s. 0d. per square metre.

In Cotta the price of land increased by 1,000 per cent., and in Heidenau by 1,200 per cent. in the 10 years from 1889 to 1899.

The Town Council of one of the larger Saxon towns remarks in reference to this, that it is the builders who have in an unscrupulous way, often only for the purpose of making money without doing anything to earn it, caused the great rise of rents which has taken place in the last few years, or, at least, done much towards causing it. They take over, *e.g.*, at the price of 22s. a square metre, because they cannot lose anything by doing so, building land which cost only 5s. per square metre a few years ago, pay for money borrowed from land speculators eight per cent., and even more, in interest, and yet, in consequence of the short supply of dwellings here, they manage to find purchasers at prices which, if they leave no great profit, are yet far above the real value of the land and houses sold.

Similarly the authorities of the Dresden Governmental District say in their report for 1898:—"Besides the building trade, which seeks to build houses for the purpose of selling them as quickly as possible at a profit, and which in this way prevents, rather than gives, a supply of good houses really suitable to the needs of the purchasers, there is much speculation in land. Where there is any likelihood that building will take place, large areas of land are bought by speculators, acting either singly or several together, and these areas are then sold at a profit in smaller lots to persons who desire to build. Incredibly large profits are thus made. In some cases speculators gain hundreds of thousands of pounds. It is noteworthy what ingenuity is shown by these persons in discovering where they have a chance of gain, and how quietly they manage to get the land into their possession. The cost of building land is naturally much raised by these middlemen."

It is obvious that prices for land thus raised not only make

it impossible for persons of modest means to get houses of their own, but also form a chief factor in the calculations by which rents are fixed.

By the preparation of building and town-extension plans, and by the consolidation and redistribution of sites, this speculation can be so far counteracted that the supply of land fit for building on can be increased, and the creation of artificially raised prices be hindered.

But its unbridled power is still more restricted by the building regulations contained in the Housing Law, which vigorously enforces a limitation of the degrees to which sites may be covered with buildings. This limitation is also desirable in the interest of both health and pleasantness of life. It is often urged against such measures that a large number of storeys, and the erection of side and back buildings, are necessary if dwellings are to be cheap, as in this way a considerable part of the cost of building, and especially the price of land, is distributed over a large number of dwellings. Those who use this argument overlook the fact that all experience shows that the price of building land is determined by the amount of building which is allowed on it, and that every increase in the amount allowed causes a considerable increase in the price of the land, not only in the same building district, but also in the adjoining districts. Thus the Technical Government Commissioner, Professor Fruehling, said in the Second Chamber:—
“ If the distance which must be left between adjoining houses is increased by law, certainly the amount of land needed for each site also increases, but the matter is not as was represented here in the example used by Herr Enke, that an increase of 75s. is made in each rent. In my opinion, if such an increase were caused, it would be easily borne in consideration of the advantage given by detached buildings; but in fact the result would be different, because the seller of land always takes into account the possibilities of utilising it which the law gives him. If it is permissible to place houses so close together, their number will be the greater, and at once the price of land rises. You find, for example, here in Dresden that in one district, in which houses may be built in rows,

land costs 60s. a square metre, while perhaps in the opposite district, in which only detached houses are allowed, land costs only half the price. Considerable differences are found even in the case of sites which are only a few paces from each other, because the man who lets the ground calculates from the building regulations the amount of use which may be made of it, and fixes the price accordingly. The attempt to create cheap dwellings for the poorer classes, of course, finds a limit in the prevailing conditions, which in large towns and manufacturing districts are very unfavourable to cheapness. It would be a short-sighted and unsound policy to create in such places cheap dwellings by the abandonment of conditions necessary for the health and welfare of the community." And Dr. Rumpelt quotes from the Introduction to the Law these words: "There is a general complaint to-day respecting the unceasing influx of poor people from all parts of the country into the large towns, which is an increasing cause of evils and difficulties for the towns, and deprives the country of the labour it needs. If, in consequence of all that is needed to make houses wholesome, pleasant and suitable for family life, rents are higher in large towns, and there is perhaps a certain lack of dwellings, this is only the natural cure for the evils. From the point of view of the National Government it can only be welcomed if some industrial undertakings, if only on account of the more favourable conditions in regard to dwellings, are removed to towns of moderate size, or into villages, and help these communities, which are generally poor, with their rate and taxpaying power."

The power, which the Law entrusts to the chief police officials of country districts, to allow many of the provisions relating to building to be disregarded, where this can be done safely, is of great importance. The cases, to which the power of dispensation is chiefly intended to apply, are those of buildings on estates away from villages, small places in which agriculture is the chief occupation, and places where most of the people are poor. In all these cases the Police Authority can allow the regulations as to distance between buildings, number of storeys, height of rooms, etc., to be disregarded, so long as

it takes measures to ensure that the buildings shall be safe and wholesome.

The Law contains a provision, which is new in German legislation respecting local by-laws, and which gives a power which is often much needed. The provision in question is that parts of districts, adjoining a district which has by-laws, may be placed under those by-laws. Thus, if a town maintains a good road which runs along the boundary of its district, the owners of that part of the adjoining district which enjoys the advantages given by the road, may be compelled, after their views, and those of the authorities of their districts, have been duly heard, to contribute to the cost of the road, and to be in other ways treated as inhabitants of the town district.

All local by-laws must receive the approval of the Ministry of the Interior.

The Introduction to the Law remarks: "As unplanned and irregular building, either within or without the boundaries of a place, would be incompatible with the due protection of the public welfare and of the serious interests of the inhabitants of the place, before land hitherto unbuilt on can be thrown open for building, preliminary agreements must, as a rule, be made, especially respecting the position of the streets and the building-lines. Recently the Ministry of the Interior has considered it important that the local authorities should prepare building plans, which, after being thoroughly examined and receiving the approval of the Ministry of the Interior, are binding on all interested persons, and, therefore, give lasting legal security. The new law has been prepared from the same point of view. It is not, of course, intended to require that no new building shall be erected unless a building plan is constructed and building-lines laid down. But in the case of every considerable area, on which building is to take place, and where the relations of ownership are complicated, the preparation by the local authorities of a building plan is the only way in which all the interested parties can have their just interests considered, and have justice done where the interests conflict, and obtain legal security for the arrangements which are made.

To the building plans prepared by the local authorities belong also building regulations. Regard for the health and welfare of the community, and for the beauty of towns, requires that the mode of building adopted in the old confined towns, with its defects, shall not be transferred to the virgin ground of the outer districts and to country places. In the rebuilding of parts of old towns it was necessary, for economical reasons, to allow lofty and close building; and the error was made of allowing the same kind of building generally, even in places where there was no economical reason for it. In order to avoid this mistake, the system of "building districts," in which different degrees of closeness of building and of density of population are allowed, must be adopted and maintained for those towns, in all parts of which it is not possible to allow much space between buildings. This has already been done in many towns in Saxony, and for some parts of Dresden, Leipzig and Plauen; and, outside Saxony, building regulations, providing for a complete system of graded districts of building, have been put into force in, among other towns, Altona, Frankfurt am Main, Halle, Hildesheim, Bochum, Barmen, Bonn, Wiesbaden, by the municipal authorities; in Coeln, by the Government at the request of the municipal authorities; and in the suburbs of Berlin, against the wish of the municipal authorities.

If the way in which different properties are held creates hindrances to the proper carrying out of a building plan, especially to the creation of well arranged sites for buildings, or of the necessary streets, then the processes of redistribution or of expropriation must be used. These are regulated by the fifth section of the Law. The Introduction states that the thought of alteration in the shape of properties by exchange of plots of land, to be effected, if necessary, by compulsion, is not in itself unknown in the legislation of Saxony. It has been embodied in laws relating to agricultural properties. In other countries provisions for the compulsory rectification of boundaries of plots of land, and exchange of plots of land, for the formation of sites for building, have been much extended. This happened for Hessen in 1895, for Hamburg

in 1892, for Baden in 1896, for Vienna in 1883, for the town of Basel in 1895, for the Canton of Zurich in 1893 and 1894. In Prussia efforts have been made to deal with the matter for the whole kingdom by means of a Bill, known as the *lex Adickes*, introduced in the Prussian Parliament in 1892, 1893, and 1894 by the Oberbuergermeister of Frankfurt am Main, which has twice been passed by the Upper House.*

When agricultural land is being transformed into building land the owners are often led, by consideration for their own pecuniary interests, to effect exchanges of land with each other for the purpose of forming convenient building plots. Sometime, too, they form companies for the same purpose. But cases occur in which the stupidity or obstinacy of a single owner makes all agreement impossible. It is still worse when calculating selfishness prevents an arrangement. A building company, or a large speculator in land who has bought a certain number of building plots, or has divided a large area into such plots, and offered them for sale, needs only to take advantage of any opportunity which offers to buy a single plot of the adjoining land, before it has been properly arranged for sale, and then, by refusing to exchange, he can prevent his competitors from selling as long as it is his interest to do so.

If the right rearrangement of plots of land is made impossible by the opposition of perhaps one person, the consequence in many cases is a system of building unfavourable to the health and welfare of the inhabitants, the erection of unsuitable houses, awkward streets and squares, or the artificial creation of difficulty in all building, which plays into the hands of speculation. Hence cases occur in which regard for public interests justifies interference with private property. Moreover, experience shows that the mere existence of the possibility of legal compulsion suffices, in most cases, to induce those who offer unjustifiable opposition to come to a reasonable arrangement in good time.

While the process of redistribution consists essentially of

* The *lex Adickes*, in much modified form, and with its application limited only to Frankfurt am Main, became law in August, 1902.

the exchange—if necessary, the legally enforced exchange—of plots of land, the process of expropriation, in the true sense of the term (the depriving an owner of his land and paying him compensation in money) has to be considered. Before 1900, in Saxony expropriation could only be effected in cases in which there was urgent public need that property should be dealt with. Experience has proved that the limits to expropriation have been drawn too narrowly. If land necessary for public streets and other public works can only be expropriated to supply an urgent public need, that is, a need which exists at the moment, it is made doubtful whether any far-seeing well-timed scheme of the Town Council for the improvement of the town can be carried out, especially in large towns. For the success of such schemes expropriation must be allowed at the time when it seems necessary in the public interest. This is provided for in the new law. A too large use of the power so given is prevented by making it necessary to obtain the approval of the Minister of the Interior before expropriation can be effected.

Further, it is necessary to extend the power of expropriating, in other cases as well as those of the destruction of property by fire, to the land adjoining the newly planned streets, so far as such land is necessary for a suitable rebuilding scheme. This applies especially to cases in which whole groups of buildings have to be pulled down in the interest of traffic or of the public health, as well as to cases in which buildings have been destroyed by fire, water or some other power of the elements. If the power of expropriation be restricted to just the area which is necessary for the construction of a street, towns are only in exceptional cases, and only with the greatest difficulty, able to effect thorough reform of conditions affecting traffic and housing in badly built old districts. The disproportionately great sacrifice of money, and, still more, the obstacles created by the lands being in so many hands and being of such awkward shapes, cause the wreck of the most carefully prepared schemes. The backwardness of most German towns, in comparison with foreign towns, in this important department of reform is a consequence of the little developed

German expropriation legislation, which places difficulties in the way of such improvements instead of promoting them. But the power to expropriate districts ought to be restricted to land which has been built on. The project of Oberbuergermeister Adickes certainly goes further, inasmuch as he makes it the first object to give towns the right to expropriate unbuilt on land, on which to erect dwellings; so that they may by their own action supply the deplorable dearth of dwellings. Similar wishes have been loudly expressed in Saxony, especially by medical men. But, in the opinion of the Government, this would be going too far. The towns are not prevented by existing regulations from having a free hand as to the purchase of land in case of need, and from building dwellings on the land they buy. But such operations must always be carried out with great caution, in order, on the one hand, not to involve the town in financial speculation, the end of which cannot be foreseen, and, on the other hand, not to enter, unnecessarily, into competition with the sound professional activity of private builders. As the activity of towns in building dwellings ought to be limited by these considerations, there is no sufficient reason for specially facilitating and encouraging it by the grant of the power to expropriate, unless some adequate need exists; and all the less because mistaken action in this direction might promote the undesirable influx of population into the towns from the country.

When building plans are made, it seems desirable, especially for large towns, that the towns shall be able, by a resolution of the Town Council, to acquire, as soon as the plan is approved, and if necessary by compulsion, the land needed for public open spaces, as experience has proved that it is only in this way that great rises in the price of the land can be prevented, which often make it impossible to carry out the arrangements contemplated in the building plan. This power is also given by the new law.

For a satisfactory solution of the Housing Question it is necessary, not only that the erection of a sufficient supply of wholesome dwellings shall be secured, but also that the proper use and maintenance of, at least, all the houses which are let,

and of the sitting-rooms, bedrooms and workrooms of servants and assistants, shall be ensured by an efficient system of inspection. The Government of Saxony, therefore, desired that those Saxon towns which have a large population of the working class living in rented houses should maintain a system of inspection. The new law empowers municipal governments to establish by their by-laws minimal conditions respecting space, etc., for dwellings, and to establish and maintain a system of inspection.

In Saxony hitherto all buildings have had to be examined by the authorities before they could be occupied. The new law provides that, in addition to this final examination, all new buildings shall be subjected during the process of erection to continuous inspection by trained officials.

BUILDING PLANS.

The following are some of the provisions of the law respecting the preparation of building plans:—

§ 15. If a district, which practically is still unbuilt on, is to be laid open for building, as a rule a building plan must be prepared for it by the Local Authority. A building plan can also be prepared for a district already built on.

§ 16. By building plans the following especially are regulated:—(a) the building-lines, within which the sites may be built on, and by which the areas intended for traffic or for front gardens, as well as those which form part of the high-flood district, are to be divided; (b) the mode of building, the distance of buildings from the street-lines and from the boundaries of adjoining sites, the height of buildings, the permissibleness of trade buildings, as well as the extent to which buildings may be erected behind the main buildings; (c) the rectification of water courses, the draining of the district, as well as the nature of street-crossings (above or below).

§ 17. Building plans must comprise the necessary plans and the regulations which have to be published respecting building in the district. The nearer definition of the material

needed for a building plan is reserved for an executive decree or for local by-laws.

§ 18. In the preparation of building plans attention must be paid to the claims of security from fire, of the public traffic which is to be expected, and of health; to a suitable supply of water and to drainage; also to the position and development of the place, and to the need for dwellings corresponding to the local conditions; and also to ensuring that streets and squares shall not be disfigured. In this relation special attention must be paid to the following points:—(a) The position of the blocks of building, as well as of the lines of streets and the building-lines, must be adapted to the configuration of the land, and must be such that an adequate supply of sunshine in the rooms occupied is secured; (b) the dimensions of the various blocks of building must be such as to allow of the proper utilisation of the ground for building; (c) the width of streets and footpaths is decided by the requirements of local traffic and must be suitably graduated in accordance with the nature of the streets as main streets, by-streets, or streets only used for dwellings. In the case of streets of detached or semi-detached buildings, where there is no proper through traffic, the part of the road used for vehicles need not exceed a width of eight and three-quarter yards. In the case of streets for which through traffic may be expected eventually, especially tram-lines, and a widening of the street must be anticipated, there must be front gardens of suitable depth on both sides. Private roads, which give access to the backs of buildings for several blocks, must not have a less width than six and a half yards. Streets with open building and a moderate amount of through traffic, and all streets with continuous buildings, must have a width of at least 13 yards, and streets, which have much business traffic or through traffic, must be made at least $18\frac{1}{2}$ yards wide; (d) gradients in the streets must be distributed as evenly as possible; heavy gradients, deep cuttings and embankments, as well as inordinately long straight lines of streets, must be avoided as much as possible; (e) in determining the directions of streets care must be taken to provide short and convenient connections

between streets and with the chief centres of traffic; (*f*) open spaces and public shrubberies must be so arranged in respect of size, position and number, as to be useful in relation both to convenience of traffic and to general welfare. Sites for churches and school buildings, as well as public playgrounds and recreations grounds, must be provided in sufficient number; (*g*) in deciding what shall be the kind of building allowed, and as to whether factories and workshops shall be allowed, the existing character of the district, or part of a district, and its needs must be taken into account. In any case, care must be taken that continuous lines of building, so far as they are not excluded by the local building regulations, shall be interrupted in sufficient measure by streets of open building, and that in the outer districts a suitable restriction of the density of building and population occurs; (*h*) front gardens, when they are not provided only in view of a future widening of the street, must have a depth of at least five yards; (*i*) the number of storeys to be allowed must be decided according to the character of the place and the width of the street. For country places and districts of detached houses there must not be more than three storeys, and elsewhere not more than four, and only in the central districts of large towns, in unusually wide streets or squares, or along the banks of streams, which have been rectified at great cost by the riparian owners, may five storeys be allowed by way of exception. The ground storey, any intermediate storeys, and the roof storey, if it is used for dwelling purposes, are included in the number of storeys allowed; (*k*) the necessary courts and gardens in the interior of a block of buildings must be secured by regulations respecting their area and position, and, if necessary, by fixing back-building lines; (*l*) so far as any building at all is permissible on land behind buildings, it must be made to depend on the size of the court or garden, and, as a rule, be allowed for dwelling purposes only if a supply of light at an angle of at least 45 degrees is secured for all the windows of the back-building, and the space between the front and back-buildings is, in suitable cases, planted as a garden. Exceptions are allowed under special conditions in the central districts of large towns.

In no case may the back-buildings of a street form a continuous row; (*m*) in the case of large blocks of building, which are suitable for the purpose, power can be reserved for the Building-Police Authority, on the application of the parties interested, to allow supplementary streets of dwellings to be formed, but in such cases only detached or semi-detached houses, of not more than three storeys, can be built.

§ 29. The building plan or building-line plan, when it has been once decided on, is authoritative in relation to all buildings in the district to which it applies. But the owner of land, which the plan shows to be intended for use for public traffic, may use it till he has to surrender it to the community, for purposes other than building, and may enclose it with a suitable fence. In particular, so long as the town has not declared its readiness to take over possession and the Ministry of the Interior has not given its consent to expropriation, he is at liberty to make changes in the mode of cultivating the land which increase its value. If later the land is expropriated or the owner has to give it to the town, without receiving payment, compensation for the increase of value must be paid him.

§ 30. A plot of land, not yet built on, which is shown by the plan to be intended for use as a street or square, cannot be used for building purposes, except that eaves, balconies and other projections of buildings may be allowed to overhang it. The erection of temporary buildings is, however, permissible, but the owner must remove them, and any fences which he may have put up after the fixing of the building plan, at his own expense, so soon as the land is needed for use as a street or public square.

§ 35. If the creation or alteration of a building plan appear to be desirable, the Building-Police Authority can prohibit building in the district in question, with the effect that the erection of new buildings, and the alteration of existing buildings, will not be allowed, or will be allowed only so far as they are not likely to make the carrying out of the new plans more difficult. The prohibition, with exact indications of the district to which it applies, must be published. The prohibition becomes effective when published, and lapses if the

building plan has not been definitively adopted within two years at latest from the first publication.

§ 36. While the prohibition is in force, and when the building plan has been adopted, plots of land in the district may not be divided except by permission of the Building-Police Authority. Permission can be refused, if the division affects a building, if the necessary fire-proof walls have not been built along the new boundary, or if, by the division, any of the regulations respecting the size of courts and gardens would be infringed, or the carrying out of a building plan or of a redistribution plan would be made impossible or difficult, or, lastly, if unusable pieces of land would remain.

§ 38. When it seems desirable for the expected development of a place to decide beforehand on the principal streets for traffic, and the principal lines for the drainage, and for the water supply, of a district of considerable size, the Building-Police Authority, after hearing representatives of the communities interested, can make a plan for the enlargement of the place, on which the separate building plans subsequently made must be based.

STREETS AND SEWERS.

The following are some of the clauses which deal with the making of streets and sewers:—

§ 39. Every person who builds must supply, at his own cost, and in the quantity shown in the building plan, the land for the streets indicated in the building plan or the building-lines plan, to a width of 28 yards in the case of streets which will have buildings on both sides, and to a width of $18\frac{1}{2}$ yards in the case of streets which will have buildings on only one side, (a) along his building plot, therefore, in the case of corner plots, along both sides of the plot; (b) as far beyond as is necessary to make the street reach from street-cross to street-cross, and, moreover, to connect it on one side of the building plot with a street already used for traffic. He must open up the land and make it over to the town free from all cost and encumbrance, and, unless the town itself undertakes this, he must make it into part of the street and sewer it.

§ 40. He who wishes to build on his land situated on a public square must supply and prepare the part of the area of the square shown on the building plan to be intended to be street, in accordance with §39, to a breadth of 26 yards, and, in addition, he must sell to the town any land belonging to him which forms part of the inner portion of the square. For the rest, the community has to obtain and put into order the centre of the square. The square must be put into order, at latest, when the streets surrounding it are completed, all the area of the square is obtained, and at least a third of the circumference of the square has been built on.

REDISTRIBUTION AND EXPROPRIATION OF LAND.

Among the clauses which relate to the redistribution and expropriation of plots of land are the following:—

§ 54. If the proper use, for building purposes, of land which is within the scope of a building plan is prevented, or made very difficult, by the position, form or size of the plots of land or parts of the plots of land, then for the purpose of obtaining convenient sites for buildings, a repartition of the area can be made, even against the will of the owners, by an alteration of the boundaries of the plots, or by redistribution, in case the new arrangement is in the public interest, and a request to that effect is made to the Building-Police Authority either (a) by the Town Council, or (b) by more than half of the interested owners of land who together own more than half the land in question.

§ 56. Separate plots in the area to be reapportioned, which are built on or used in some unusual way (as *e.g.*, gardens, nursery grounds, etc.), the value of which would make it difficult to give compensation for them in the form of other plots of ground, may be partly or wholly excluded from the redistribution. But the owners, in this case also, must submit to simple rectification of the boundaries.

§ 57. For the carrying out of the redistribution the Local Authority must prepare a redistribution plan giving the necessary detailed regulations. In the case of § 54 the plan can be provided by the owners who ask for redistribution.

§ 58. The plots of ground belonging to all the owners concerned are to be thrown together, and the public roads which the new building plan makes unnecessary are to be included. From this mass the land shown by the building plan to be intended for the future public roads must first be separated, and the building land which remains must then be distributed in such a way that each owner of a plot or plots of land shall have a share of the total value corresponding to the share which he had in the whole amount of land before redistribution. The community must have land for public roads assigned to it to replace the roads which were absorbed. In fixing the values on which the redistribution plan is based, and which are to be fixed with the help of experts, all material and legal conditions must be taken duly into account. For each of the plots of land suitable for building purposes one or more plots of land, as far as possible in the same place, must be given. Plots of land with buildings on them, as a rule, subject to rectification of their boundaries, are to be restored to the persons who have hitherto owned them. The land, which, according to the building plan, is to be used for the future roads, so far as it is not used at once, must be distributed, when provision has been made for the necessary means of access to the newly divided plots, among the various owners of plots, in the same proportion as the building land, and, as far as possible, in such a way that, for each owner, his future building plot and his share of the future road may lie together. Unavoidable differences of value between the earlier plots and those received to replace them can be settled in money.

§ 59. Plots of land which are too small to serve as sites for buildings, if the parties interested do not make a voluntary arrangement for disposing of them, must be sold to the community, which will distribute them among the owners of the other plots, from whom it will recover the money which it has paid.

§ 64. If the erection of buildings within a block would render redistribution impossible or difficult, the erection of the buildings can be forbidden. Such a prohibition lapses if the redistribution plan is not completed within two years.

§ 67. If (a) for widening, straightening or continuing streets, roads and squares intended for traffic, (b) for making and completing the same, (c) for constructing and widening bridges, (d) for repairing river banks and embankments, (e) for constructing sewers and laying down water pipes, for carrying water pipes and sewers into separate building plots, as well as for connecting sewers with those of neighbouring towns or districts, (f) for completing or amalgamating plots of land lying amongst rows of houses, land has to be acquired, or has to be subjected to some easement or analogous burden, the necessary land can be expropriated, or be subjected to burdens, in return for compensation, so far as this seems desirable in the public interest, on the application of the Town Council through the Building-Police Authority, subject to the approval of the Ministry of the Interior.

§ 68. If, in the interest of traffic or of health, it is necessary to pull down buildings or groups of buildings, or if the building plan for a district, the buildings in which have been destroyed by fire, water or some other elementary power, cannot otherwise be so carried out as to prevent similar danger in the future, the Ministry of the Interior can, at the request of the Town Council, grant power to expropriate the whole district, or such part of it as is required for the due execution of the work.

§ 72. By a by-law power can be reserved for a town to require the immediate expropriation of the land shown in an approved building plan to be intended for a public open space.

REGULATIONS RESPECTING MODE OF BUILDING.

The following provisions form clauses in that part of the law which relates to the kinds of buildings which are allowed.

§ 90. Buildings which would form a public disfigurement of the place can be prohibited. By a by-law higher architectonic demands can be made for certain streets or parts of streets in respect of the buildings to be erected there.

§ 94. Whether building shall be in open or closed rows (*i.e.*, whether houses must be detached or semi-detached or may be built in continuous rows) must be determined by a local by-law. In country places, and in suburbs where the houses are detached or semi-detached, and which have no local building regulations, as a rule, only detached houses, or houses in groups, can be allowed. But exceptions will be allowed, especially in the cases of factories and large farms and the dwellings of the workpeople employed there, and also in the case of undertakings carried on by the State and by societies of public utility.

EDICTS RESPECTING SUPPLY AND INSPECTION OF DWELLINGS.

Since the passing of this General Building Law, the Saxon Ministry of the Interior, by an edict issued in April, 1901, has called on all towns with more than 20,000 inhabitants to establish a system of inspection of all dwellings rented by members of the working classes; and by another important edict, issued in March, 1903, the Ministry calls the attention of the authorities of the various divisions of Saxony to the fact that, especially in the large towns, Dresden, Leipzig, and Chemnitz, but also in smaller towns and in country places, there is a deficiency of small dwellings, and that consequently such dwellings are too dear, and it says that a dwelling for which the tenant has to pay more than a sixth part of his earnings must be regarded as relatively too dear. As the statements in this edict are as true of the condition of our English towns as of that of Saxon towns, and as the edict contains valuable recommendations as much needed here as in Saxony, we give a summary of it.

After stating that unsatisfactory conditions of housing exist in a large part of the kingdom, the Minister says:—"It is not necessary to show more fully that these conditions, whether they spring from early times or later, must be improved, and that the need for improvement must be regarded as very urgent. For, in proportion as the housing conditions are insufficient, the general working and disease-resisting power of the population is weakened, the outbreak or spread of

certain serious diseases, especially typhus, consumption and syphilis, is promoted, morality and contentment are undermined, intellectual training is lowered, and at the same time the economic success of the individual citizen and the general welfare of the community are endangered and injured." Then the Minister points out that the Building Act of 1900 may be expected to do much good, as it prevents such close covering of the ground with buildings as was previously allowed, while providing ample power for dealing with exceptional circumstances. But, he adds, that what has hitherto been done is quite insufficient, and he proceeds to indicate the various kinds of action which are now needed. They are these:—

First of all there must be effective inspection of dwellings.* The new law and the decree of April 29, 1901, already provide

* Several large towns in other parts of Germany, including Hamburg, Coeln, and Strassburg, have already adopted the system of inspection of dwellings. In Wuerttemberg all towns with more than 3,000 inhabitants must adopt it. After discussing proposals for such a system for nearly five years, Hamburg introduced inspection in 1898, and its Council is now considering a Bill providing for a continuance of the system with the changes which five years' experience has shown to be desirable. In the Hamburg system the town is divided into nine large districts, and the work of inspection is done by nine Superintendents of Districts and 162 Inspectors. All the Superintendents and Inspectors are unpaid. Like the helpers of the poor who work in connection with the Elberfeld System, they would be fined if they did not accept the offices to which they are elected. Should English towns ever resolve to adopt an effective system of inspection of dwellings, they will be able to learn much from the experience of Hamburg, some of the results of which are described in an article in the *Zeitschrift fuer Wohnungswesen* of November 25, 1903. Stuttgart, which in 1900 had 181,463 inhabitants, introduced the system of continuous inspection of all small houses, and of the rooms in larger houses which are occupied by apprentices and servants, in 1902. The work, with that of publishing twice a week a trustworthy statement of the number of dwellings which are to be let, and of giving to persons who are seeking dwellings information respecting those which are empty, is done by a Dwellings-Office, a full and interesting account of which, with copies of all the post-cards and other papers, by means of which house-owners are compelled to give it information, was published in 1903 by the *Stadtschultheissenamt* Stuttgart. For the purpose of inspection the town is divided into 120 small districts, in each of which the small houses are examined by an unpaid visitor. The visitors are aided by a staff of competent paid officials. It is calculated that the Dwellings-Office saves house-owners at least £5,000 a year by lessening the need of advertising.

that towns with more than 20,000 inhabitants shall establish such inspection, but it is to be considered whether smaller towns, and the suburbs of large towns, do not require a similar system.

But inspection of dwellings must fail, if there are not enough wholesome dwellings, or if such dwellings are too dear. In both those cases it is impossible to prevent the occupation of unwholesome dwellings and the overcrowding of dwellings. Where these evils exist, an increase in the supply of wholesome and cheap small dwellings must be striven for. Obviously the building of houses by private persons must not be prevented. The object sought must be to fill the gaps left by commercial builders, and, by the creation of competition, to promote free supply in the dwelling market.

1. In the first place, the erection of dwellings by employers may be noticed. Many workpeople do not like to live in houses built by their employers, because the feeling of dependence is thereby increased, but this difficulty may be surmounted by tact and good sense. In Saxony comparatively few houses have been built by employers, probably not more than from 3,500 to 4,000.

2. Real self-help of the working classes has not produced large results in relation to the supply of dwellings, although there are some workmen's building societies in Saxony. This is not to be wondered at, as the difficulties connected with obtaining money and with building are very great. It is only when the self-help of working people is supported by the public spirit of the community that it can produce large results.

3. It is the Community, the Town, which can do most, and which has most reason to do much, to provide wholesome dwellings. Hitherto, only in isolated cases and generally only in insufficient degree, have towns done anything by themselves in the way of erecting dwellings, or granting cheap loans, or providing cheap building land. The numerous communities in which wrong conditions of housing prevail, if they conscientiously consider the extraordinarily great importance of the question, will not be able to abstain longer from the fulfil-

ment of the duty to do more than they have hitherto done. Although it is not possible to give definite instructions, as, from the nature of the case, local needs and conditions must decide what is to be done, the following considerations must generally be of importance:—(a) While it will only be necessary in exceptional cases, for a town to act, as some German towns have already acted with good results, and itself build houses for the public, towns, and especially large towns, will often have to build wholesome and suitable dwellings, at the lowest possible rents, for those of their servants who have the lowest salaries. In relation to such action, it must be remembered that every increase of the supply of dwellings is of use, not only to those who are immediately affected, but also to a wider circle. (b) Towns, as well as all other authorities, in proportion to the need and to their means, must give every possible help to building societies and all kinds of societies of public utility, which seek to erect wholesome and well arranged small dwellings. It is not to the legal form of the society that regard must be paid; care must be taken that help is given only to societies which seek exclusively to provide dwellings, and which bind themselves not to pay dividends to their members of more than four per cent. on the amount of their shares, and, in case of liquidation, not to pay their members more than the nominal value of the shares, any surplus being reserved for public purposes. The towns can help the efforts of such societies by giving them information and advice, as well as, in some cases, by allowing their officials to work for the societies without remuneration. Further, help can be given to the societies by the remission or diminution of charges usually payable by builders to the town. A town can, either in a special case, or, generally, by means of a by-law, reduce the contributions to be made by such societies. As building needs a considerable amount of money, the granting of loans on easy terms is one of the chief kinds of help which can be given, especially to building societies of workpeople, which, as a rule, can themselves raise but little capital. Help by means of credit can also be given to the societies by the towns taking some of their shares, or becoming security for

them. The balances of town savings banks find a particularly appropriate application to such purposes. (c) The granting of cheap building land will be a great help. The possession by a town of a sufficient, indeed of an abundant, amount of land of its own is indispensably necessary in relation to the ordinary purposes of the community, as otherwise building land for public buildings is difficult to obtain; and, if enough foresight be not used, the community is burdened with unduly heavy sacrifices; and, unless communities have a sound policy respecting land, they cannot have an effective policy respecting dwellings. On this subject there is much lack of the necessary insight. The evils which prevail in the housing system, at least so far as large and growing towns are concerned, have one of their chief sources in unsound, excessive speculation in land and buildings, speculation which often uses very ignoble means. A community can find no more effective way of keeping this speculation within the limits of justifiable business than that of itself exercising a moderating influence on the land market. Hence, towns, on the one hand, should increase their holding of land to the fullest possible extent by well-timed purchases, and, on the other hand, they must abstain from dealing with their land on strictly commercial principles and seeking only to make profit, the gaining of which ought to be subordinated to higher aims. As a rule towns must retain all the land they have, and part with a portion of it only in cases in which they have security that the land they give up will never fall into the hands of speculators. Such security exists when land is sold to a society of public utility, or conditions are attached to the sale which give the community the right of pre-emption, should the purchaser desire to sell. It may be mentioned that, especially in the case of societies of public utility, the sale of land by a town on suitable terms of chief rent may be to the interest both of the town and of the purchaser. In some cases it may be well to grant to builders, who undertake to erect wholesome and cheap small dwellings, the same advantages which are granted to societies of public utility. (d) Finally, traffic with suburbs of the larger towns must be facilitated in every possible way, not only for

workpeople, but also for professional and business people and for school children. If the town, as is for many reasons right and desirable, has the tramways in its own possession, all that is necessary can be done by it directly. Till that is the case, as much influence as possible must be brought to bear on the owners of the tramways, and, when new concessions are made to them, explicit conditions must be included.

The existing evils cannot be got rid of with one stroke, nor by the use of only one set of means, but can only be diminished in the course of time and by efforts which, however much the aim be kept in view and the efforts be connected with each other, must continue to be only a minor occupation of the various authorities. All classes up to the middle class are strongly affected by the housing question, and the necessary co-operation will be the more successful the more the conviction becomes confirmed that, in the domain of the housing system, economical, religious or party-political differences of opinion need not prevent the work in common which is necessary for the welfare of the Fatherland.

The Ministry recognises that all cannot be done by directions of the authorities. It will, therefore, be the principal task of the authorities of every rank to strengthen everywhere the right appreciation of the importance of the housing question, the recognition of the means provided, and desire for the removal of the evil. While the towns generally must be enlightened, it is, of course, obvious that to employers, workmen's societies, and persons of public spirit, only encouragement, and, in some cases, advice, can be given, the usefulness of which will largely depend on their being of the right kind and given at the right time with the greatest attention to what is practically possible and desirable for those who receive them. Perception of the evils which exist is the first step towards improvement. The authorities of all ranks will, therefore, regard it as their duty to obtain trustworthy and continuous information respecting housing conditions. In particular populous towns ought not to neglect the duty of obtaining complete statistics with regard to dwellings. The Ministry wishes to receive regularly in future every three

years, but for the first time on October 1st, 1904, from the chief officers of districts, and from Town Councils which have revised regulations, reports on the condition of the housing system. In the reports it must be stated whether, and what, evils exist, especially whether there is a deficiency of small dwellings, whether those which exist are unsatisfactory, are overcrowded, or too dear, what are the causes of the evils, especially whether unsound speculation in land or buildings exists, as well as what remedial measures have been taken or are recommended, either by the adoption of building laws or regulations respecting dwellings, or by the supply of additional dwellings. The reports must especially state in what manner, in particular cases, effect has been given to this decree. The Ministry uses this occasion to call attention to the information which the weekly newspaper, *Soziale Praxis*, gives in brief form on the housing question, as well as on all other subjects of social politics, and to the detailed information on matters connected with the housing question contained in the recently founded *Zeitschrift fuer Wohnungswesen*.

STATE-AID TO A SAXON BUILDING SOCIETY.

A striking example of the zealous and intelligent way in which German Governments and public institutions are co-operating with German building societies in efforts to provide a sufficient supply of cheap wholesome dwellings is mentioned in the report recently published by the Dresden Savings and Building Society for 1902, the fifth year of its operations. We translate the following account from the *Zeitschrift fuer Wohnungswesen* of August 25th, 1903:—“The German Empire, whose State Secretary of the Interior, Count von Posadowsky, has already carried out in other places a new and certainly very happy imperial land policy, has bought a piece of land, containing two acres, in Loebtau in Saxony, close to Dresden, for £12,000, and has let it to the Dresden Savings and Building Society on a chief rent of £268 10s. a year for 80 years. The society is now erecting on it a group of buildings, which front four

streets and which contain 30 dwellings, and it is hoped that by the end of next year homes for nearly 1,000 persons will be provided there. The National Insurance Institution for Saxony has lent, on the security of the lease, £50,000 at three and four-fifths per cent. interest, a rate which includes a contribution to a sinking fund. A second loan of £10,000 at four per cent. interest has been granted by the Imperial Ministry of the Interior. The lease was granted on condition that a third part of the dwellings should be let to sub-officials of the Imperial Postal Service."

CONTINUOUS INSPECTION OF DWELLINGS IN SAXONY.

By the introduction, on July 1st, 1903, of a system of continuous inspection of dwellings into 40 village communities in the district of Chemnitz, effect has been given, on a considerable scale, to important clauses in the General Dwellings Act for the Kingdom of Saxony of July, 1900. Till the date mentioned, the inspection of dwellings had never been tried in a village community in Saxony. Two hundred and twenty-three inspectors of dwellings have been appointed, each of whom has his own small district. They are chosen from among persons of "common-sense, insight and public spirit, who enjoy public confidence." All rented dwellings and workrooms, and all rooms used by workpeople-lodgers, are to be inspected from time to time, for the purpose of ascertaining whether there is anything in their arrangements to endanger the safety, health or morals of the occupants. An account of this most important system is given by Dr. Carlitz, of Chemnitz, in the *Zeitschrift fuer Wohnungswesen* of August 25th, 1903.

THE "LEX ADICKES" FOR EXPROPRIATING AND REDISTRIBUTING LAND.

The purpose and scope of the Bill respecting the redistribution of plots of land, known as the "lex Adickes," to which reference is made by Dr. Rumpelt (see pp. 60, 62), are thus described

by Dr. Ludwig Sinzheimer in *Die Arbeiterwohnungsfrage*.* The proposals made by Oberbuergermeister Adickes have a double object. They seek, firstly, to increase the supply of building land. They seek, secondly, to make it possible to pull down groups of unwholesome dwellings. In respect of the first object, the proposals start from the consideration that serious obstacles exist to a comprehensive system of building on unoccupied land in and near towns. First of all there is the great division of property in land. This great amount of division is connected with the large number of owners of land. It often happens that some landowners would be glad to build on their land, while others wish to leave theirs unused for some time longer. In many cases the presence in a district of a number of owners who do not wish to build makes any building there impossible, or greatly delays building. If, for example, the landowners, whose property immediately adjoins the town, leave their land unbuilt on, the owners of land which lies further from the town have reason to fear that houses built by them would remain unlet, or let at lower rents, as there are inconveniences connected with living in houses which are so solitary. But it is not only the large number of owners, but also the nature of the plots of ground, that have to be considered. Many plots are so small, or are so awkwardly shaped, that either no houses at all can be built on them, or only houses which will not pay interest on the capital invested in them, or houses which, from the beginning, are unwholesome. Again, one of the conditions necessary for an increase in the number of houses, corresponding to the increase in the need for houses, is the timely and abundant formation of streets on land not yet built over. Often town councils are opposed to the formation of an adequate network of new streets, because the greater part of the cost of making the streets has to be paid by ratepayers, who get no pecuniary advantage from the making of the streets in question, while the making of the streets would bring large gains to the neighbouring landowners.

Adickes' Bill would use two means for the purpose of

* Ernst Heinrich Moritz, Stuttgart, 1902.

getting rid of these obstacles which prevent an increase in the supply of houses. The first of these means is redistribution of plots of land. It consists in this, that the private owners of a given tract of land, which is not yet built on, are compelled to make over their plots of land to the town. The town retains a part of the land thus surrendered and uses it for streets and open spaces. The rest of the ground is divided into plots suitable for building on, and is then restored to the landowners with due regard to what they gave up to the town. In carrying out the redistribution the second of the two means is applied, the expropriation of zones or districts. Not only plots of ground belonging to persons who own land immediately adjoining the new streets and public squares, but all the plots of land in the district, within which the formation of the new streets and public open spaces will cause an increase of value, are expropriated. In the redistribution of the plots of land among the private owners, an amount of land, proportionate to the value of their respective plots, is deducted from all the plots as a contribution towards the cost of streets and public open spaces.

But the expropriation of zones or districts is not intended to take place only in combination with redistribution, and therefore only on unbuilt on land. It is also intended for use in inhabited districts in such a way as to give a town, if it makes a street through an unhealthy district for the improvement of the housing conditions of the district, or if it forms a public square in such a district, the right, not only to obtain by compulsion the plots of land and houses needed for the street or the square, but also to expropriate and pull down the unwholesome houses in the neighbourhood.

The Prussian Act respecting the redistribution of plots of land in Frankfurt am Main of July 28th, 1902, does not give the power to deal with town districts which the Bill prepared by Oberbuergermeister Adickes was intended to give. It only gives power to redistribute plots of land in districts in which few buildings exist.

THE INCORPORATION BY GERMAN TOWNS OF DISTRICTS WHICH
ADJOIN THEM, AND THE PURCHASE OF LAND BY GERMAN
TOWNS.

It might easily be inferred from the account which we have given of the building plans prepared by German Municipal Governments that German towns have much more power to incorporate the country surrounding them, without regard to the wishes of the inhabitants of that country, than English towns have to incorporate the districts which surround them, and that they have greater facilities for obtaining land than English towns possess. To a certain extent this seems to be the case, but nevertheless German towns do not find it easy to incorporate populous districts, if the majority of the inhabitants of those districts are opposed to incorporation. Nor have all of them found it easy to buy much land. The procedure necessary in Prussia for the incorporation of a district is thus described in Oertel's well known work.* The incorporation of a country community, or of an independent manor, with a town can be effected only with the consent of the representatives of the communities concerned, as well as of the landowner concerned, when the Provincial Diet has been heard, and with the approval of the King. The separation of single plots of land from a town district, and their incorporation in an adjoining community or independent manor, as well as the separation of single plots of land, which have hitherto belonged to another community, or to an independent estate, and their incorporation in an adjoining town, can be effected when the Provincial Diet has been heard, with the approval of the Minister of the Interior, if, besides the representatives of the communities and the landowners concerned, the owners of the plots of land in question consent. In the absence of the consent of all interested parties a change of the kind in the areas belonging to communities and in estates can take place only if it is necessary in the public interest, and then only

* "Die Staedte-Ordnung fuer die sechs oestlichen Provinzen der Preussischen Monarchie, vom 30 Mai, 1853," von O. Oertel, Liegnitz, 1900, H. Krumbhaar.

with the approval of the King when all parties concerned and the Provincial Diet have been heard.

The incorporation of surrounding districts by German towns is rendered easier than is similar action by English towns by the facts that schools in German towns have long been so excellent, the compulsion to attend school has been so effective, and the amenities of life in German towns have been so great, that comparatively few houses, as a rule, have been built outside the boundaries of German towns, and, therefore, there are few inhabitants in the zones of country which towns desire to incorporate, and those few inhabitants have many reasons for desiring that their district shall be incorporated, and shall thus be reached by the advantages which a German town almost always brings with it. Moreover, it is probable that the Minister of the Interior is much more ready to believe that it is necessary, in the public interest, that the wish of a large town, which he knows to be very well managed, to incorporate part of the surrounding district shall be complied with, than is the English Local Government Board to believe that it is necessary for the public welfare that a large English town shall be allowed to incorporate districts, the inhabitants of which have no wish to be absorbed by it.

The purchase by German towns of land outside their boundaries is rendered easier than the purchase of land would be for English towns, even if they were as free from legal restrictions as German towns are, by the fact that land is in far more hands in Germany than in England, and holders of small quantities of land are, as a rule, less able to hold their land till it will sell for a very high price than are the holders of large estates.

The town of Duesseldorf in the last few years has incorporated a wide belt of the country which surrounds it, and is now covering this belt with streets, open spaces and buildings. In the same period it has also added considerably to the amount of land held by it. In reply to the questions which follow, and which we addressed to a friend in Duesseldorf, our correspondent has kindly sent us the answers which are given below. We believe that the action taken by Duesseldorf

is that which all other German towns have to take when they incorporate outlying districts and buy land.

Q.: How does Duesseldorf acquire land?

A.: It buys it from the State or from private owners. If a private owner is unwilling to sell, the town applies to the Landtag, and if it can show that possession of the land is necessary for the welfare of the town, the Landtag compels the owner to sell. And every community has some public land, and when Duesseldorf incorporates a community, the public land of that community becomes the property of Duesseldorf.

Q.: Has Duesseldorf any difficulty in obtaining the incorporation of adjoining districts?

A.: No. The districts are generally willing to be incorporated, because, in the case of urban districts, the taxes which they have to pay, after incorporation in Duesseldorf, amount to less than the amount they paid as separate communities, and they no longer have the trouble of looking after their own officials and institutions.

Q.: Are the laws respecting incorporation the same in Rhenish Prussia as in East Prussia?

A.: Yes.

Q.: Did anyone object to the incorporation recently effected by Duesseldorf?

A.: No.

Q.: How is it that so few houses were built in the country close to Duesseldorf? Did people connected with Duesseldorf prefer to live in the town, or were there any regulations which prevented building near the town?

A.: No laws to prevent building near the town exist. People preferred to live in Duesseldorf, because of the difficulty of getting into the town from the country, of obtaining provisions, and of sending children to school.

Q.: Did Duesseldorf buy any of the land recently incorporated?

A.: Yes; it bought some of the land from private owners and, as mentioned before, it obtained the public land belonging to the incorporated communities.

GERMAN TOWNS AND THE HOUSING-QUESTION.

Count von Posadowsky, speaking on May 16th, 1903, at a meeting in Berlin of the German Central Committee for Institutions for the Cure of Lung-Diseases, said that defective housing conditions are a chief cause of the spread of tuberculosis, and that it is the duty of towns, as must be again and again most earnestly insisted on, to give their most serious attention to the subject. They ought not to leave the purchase of land round the towns only to private initiative, but should themselves take it in hand, and then let the land on low chief rents to building societies of public utility, and so help to create better dwellings for the poorer classes.

Although many German towns stand in need of the advice given by Count von Posadowsky, some of them have, within the limits of their powers, shown as much intelligence and energy in dealing with the housing question as have been shown by the Saxon and Hessian Governments.

In the following pages we give some account of the enlightened action of the municipal authorities of Duesseldorf, Ulm, Magdeburg, Frankfurt am Main, Coeln and Mannheim.

DUESSELDORF.

Duesseldorf had 213,711 inhabitants in 1900. The Oberbuergermeister, who is elected for twelve years at a time, has a salary of £900. There are ten salaried adjoints, all of whom are also elected for periods of twelve years at a time. One has held office since 1877, another since 1890, a third since 1894. Three of them receive salaries of £500, one a salary of £450, four salaries of £400, one a salary of £350, one a salary of £300. The town and its public institutions together owned 1,192 acres of land in 1899, a quantity which has since been increased by purchases and incorporation. In 1900 it had 35 public gardens, the size of which is 294 acres, and 125 tree-planted streets 46 miles in length.

We translate the following account of some of the admirable

work of the municipal authorities of Duesseldorf from a book* prepared, at the request of the Oberbuergermeister of that town, Herr Marx, by Dr. Meydenbauer, on the occasion of an exhibition held in 1902.

MORTGAGE OFFICE AND LAND FUND.

Work of remarkable economic and social significance was begun by the town on the 1st December, 1900. The necessity of mitigating the house-famine had become imperative for the town. Naturally the most direct remedy—the building by the town of dwelling-houses with small tenements, which, as is described elsewhere, the Town Council adopted at the same time—could not be carried out as far as was desirable. It was therefore considered advisable to take an indirect way, the promotion of land credit by means of the grant of loans by the town,—in other words, the founding of a municipal mortgage bank. The fact that capitalists do not lend much money on mortgages of land and buildings is well known. It had become difficult to obtain credit, especially for a plot of land which had not yet been built upon, in excess of the value of the visible security. As yet there was no mortgage bank here.

As capital could not be obtained, house building had come to a standstill. In this way a house-famine was created here as in other towns, the mitigation of which the Town Council was compelled to regard as its task. The way was obvious: the need, created by the disinclination of private persons to advance capital, must be supplied by the credit of the town. This was a difficult task. All the customary doubts respecting work carried on by the town for itself appeared in greater strength. It was said that the town was undertaking too hard a task. The ratepaying power of the citizens ought not to be committed to such a large undertaking, which could only be carried out by means of a very large capital. The community would be directly implicated in crises, and in that case disorganisation of its finances might occur.

The Town Council believed that it ought not to give way to

*Die Stadt Duesseldorf und Ihre Verwaltung im Ausstellungsjahre, 1902. Gedruckt bei August Bagel in Duesseldorf.

these timid objections, which could be urged again everything else undertaken by the town. It is just the municipal government and its officials who possess the practical knowledge and the foresight which are absolutely necessary for the successful carrying on of such work as was in question. The public interest, which requires that there shall be steady progress in the building of dwelling-houses, and that the building trade shall be kept in a sound condition, marks out a public body as particularly suited to undertake such work.

Especially is this the case in Duesseldorf, whose growth has hitherto been continuous, and proportionate to the increase of its industrial prosperity.

The granting of building loans is justified by these considerations, but the town must not confine itself entirely to loans for building. If building loans have been made with due foresight, they soon become loans on inhabited houses. This diminishes the risk of loss for the town; and, apart from this, it would not be practicable to withdraw such loans and to transfer them to a mortgage bank. An injury would thus be done to the borrowers.

The Town Council decided at a meeting on the 24th April, 1900, to grant mortgage loans on land in the town district of Duesseldorf, and to appoint a committee to manage the mortgage business in conformity with instructions given by the Council. A grant of £50,000 was made from the town treasury for the beginning of the reserve fund of the new department. For the purpose of obtaining funds the Council resolved to raise a loan of £1,000,000 at 4 per cent. interest, for the promotion of the building of dwelling-houses in the town district, by the issue of bonds—the loan to be issued in 20 instalments of £50,000 each, according to the amount granted in mortgage loans, and to be repaid, from the sixth year after the issue of each instalment, by payments of $\frac{1}{2}$ per cent. on the capital to a sinking fund, in addition to the interest laid by. The payment would therefore last 57 years.

The Ministers of the Prussian Government welcomed "this attempt which the town of Duesseldorf had resolved to make to mitigate the house-famine," and promised to obtain the

necessary Royal sanction for the loan "with the object of furthering the building of houses, and particularly that of small and medium-sized houses."

The following extracts from the regulations respecting the loan are of interest:—Loans must only be granted on first security. The loan must not exceed 60 per cent. of the value. On land with still unfinished buildings the loans must not exceed 50 per cent. of the value of the land. According to the wish of the borrower the loan can be granted either as a redeemable loan or as a simple loan at interest. Both kinds of loan can be paid back at any time in such mortgage bonds of the town of Duesseldorf as have a rate of interest not more than $\frac{1}{2}$ per cent. lower than that of the loan. For the rest, loans at interest are at first irredeemable for five years on both sides; then redeemable for both sides by a nine months' notice. The rate of interest of the mortgage loans amounts, as a rule, to $4\frac{1}{2}$ per cent., that is, it is by $\frac{1}{2}$ per cent. more than that on the bonds. With regard to the amount of the business in the calendar year 1901, the following can be reported:—Altogether, including those already arranged at the beginning of this work, on the 1st November, 1900, 178 requests for loans on 255 pieces of land were made; 115 people seeking loans on 164 sites were granted first loans at $4\frac{1}{2}$ per cent. to the following amounts. At the end of the year eight requests for loans on 18 sites had not yet been decided on. The following loans were granted:

£500	to £1,000	on 26 sites.
£1,050	„ £1,500	„ 79 „
£1,550	„ £2,000	„ 31 „
£2,050	„ £2,500	„ 13 „
£2,550	„ £3,000	„ 3 „
£3,050	„ £3,500	„ 5 „
£3,550	„ £4,000	„ 2 „
£4,050	„ £4,500	„ 1 „
£4,550	„ £5,000	„ 0 „
£5,050	„ £5,500	„ 2 „
£5,500	„ £6,000	„ 1 „
	£10,000	„ 1 „

Total 164 sites.

By means of the Mortgage Bank, which has now been briefly described, the town endeavours to obtain a controlling influence over loans on the security of real property, so far as they are indispensable for the successful development of Duesseldorf.

But only one part of the task, which the Town Council must ask a rapidly growing community to undertake, is dealt with by the work which has just been spoken of. If the most important task of every community is to distribute the common burdens of the community among its members in proportion to the supporting power of each, the latest development of the larger German towns has shown that it is the land question which, more than all other questions, makes interference by the local administration necessary.

This is not the place in which to examine the evils which spring from the monopoly involved in the nature of land, and to consider what preventive measures are available. In that case we should have to take part in the battle respecting land ownership reform. It is only of the interest of the community, as such, that we must say a few words here. It has often happened that towns, on the removal of some institution to the suburbs, have sold the piece of land which has thus become vacant, and have felt a short-sighted satisfaction with the apparently high price obtained. But suddenly it has become urgently necessary to obtain another building site nearer to the centre of the town. The site has been sought for, but nothing worth the price has been found. The town's extreme necessity has been known, and the price of the piece of land, which has had to be finally purchased, has been relatively higher than the gain on the sale of the site sold. A far-sighted Town Council must by all means avoid this evil. The town must therefore adopt a land policy in order to counteract unhealthy speculation in land.

The Prussian Ministerial decree of the 19th March, 1901, which has already been mentioned, and which shows the highest political wisdom, speaks of this question in its relation to the solution of the housing question as follows:—"It will certainly be in conformity with a sound land policy if even towns, where a house famine already exists, do not sell those plots of land

which they own and which are suitable for cheap dwellings. The sale of land belonging to the town for the purpose of combating the house famine may very well have for a time the effect of causing more dwellings to be built and to be offered at lower rents, but it is only land speculation which profits by it in the long run. The sale, for the erection of small dwellings, of land belonging to the community is only advisable if a right of pre-emption is reserved for the community, or if adequate security is given in other ways that the land shall be withdrawn from private speculation."

When this decree was issued the Town Council were already preparing the institutions necessary for an efficient land policy. The expansion of the town, the rapid increase of the work of the Town Council, the need for the removal of existing institutions to other parts of the town, had led to the conviction that the possession of plots of land in all parts of the town was necessary. Experience had taught that land, at the time that it was needed, often cost many times as much as it would have cost a few years earlier. But it was not only for the supply of its needs that the timely acquisition of land by the town was recognised as necessary. In order that the town should obtain a direct share in the increase of value of land brought about by the work of the community, the possession by it of large areas was recognised as desirable, even if the land were not wanted for immediate use. A separate department, called the Land Fund, was therefore created for that part of the land owned by the town which was not at once needed by any one committee of the Town Council for its own purposes. The new department has its own separately managed capital which must always be maintained. Plots of land which are not yet wanted, or of which a part only is needed for the moment, are purchased by it. If any of the property belonging to the Land Fund is assigned later to another committee of the Town Council, the full value of the land is paid by that committee to the Land Fund. A loan of £250,000 is used as capital for the Fund, which is paid to it in proportion to the amount of its purchases. The debt from the loan, after deduction of the outstanding demands, must, however, never amount to more than 25 shillings

a head of the actual number of inhabitants of the town. This regulation imposes limits to the action of the department which will prevent it from being led, by hopes of increase of value in land, to make too extensive purchases. The interest on the loan must be covered by the income of the Fund and by money realised by sales. A burdening of the ratepayers of the present day with the expenses of measures which, like the purchases of land now in question, will bring profit only to the future, must in all circumstances be avoided.

In this way the Town Council has found a way of carrying on "a rational land policy" in the sense of the Government decree. The town, through the land providently acquired by it, will have its share in the "unearned increment," and will be in a position to exercise a definite influence on the formation of new parts of the town and of streets.

THE HOUSING QUESTION.

The question of the improvement of the housing conditions of the poorer classes of the population has become an urgent one in almost all large towns. The Town Council of Duesseldorf found that it was necessary to deal with the subject. For the great industrial prosperity in the years 1896—1900 had resulted, in our town as elsewhere, in a crowding together of workmen, for which private activity in building was unable to provide. Thus a real "house famine" had arisen. There was a lack of dwelling-houses of all kinds, not only, as in many places, of small dwelling-houses. It is well known that it is the case almost everywhere that dwelling-houses for families of the poorer classes are not built by speculative builders. But in Duesseldorf there was also an insufficient supply of larger dwelling-houses for families with greater requirements,—a proof that the general development of the town and the increase of the population had outstripped every calculation.

Careful consideration of the position led the municipal administration to intervene, and to use its credit for the promotion of building activity, by establishing a mortgage bank, which, on account of its exact local and practical knowledge, is in a better position than private banks to lend money on suitable

building sites, and thus to prepare the way for a steady, healthy development of building. These means for the mitigation of the house famine have already been discussed. We were able to describe the increase of facilities for obtaining loans on security of land thus created as an indirect remedy for the lack of dwelling-houses. But the Town Council did not allow the matter to rest there, but took direct action and built dwelling-houses itself. It found justification for so acting, not so much in the knowledge, which is now widely spread, that it is the duty of the community to promote welfare in all directions, but in the simple consideration that an urgent need existed, for which exceptional measures were required. In relation to the erection of buildings, the following points were considered important: Builders' profits were to be renounced from the beginning; but, on the other hand, the exceptional measures adopted must not increase the citizens' burdens. Hence it followed that the house rents from first to last must be regulated according to the actual outlay. A rise in the rent of neighbouring houses, an increase in the value of land, must be permanently disregarded. The community does not wish, by means of the houses it has built, to obtain a direct share in the increased value of land. The tenants, therefore, have the certainty that the rent will not be raised. This certainty engenders love of home, and, at the same time, justifies the expectation that greater care will be taken of the house.

In considering what kind of house should be built it was recognised that, so far as small dwelling-houses were concerned, those for one and two families would be most suitable. It was, however, not possible to build houses of that kind because for them the building expenses in wages and materials are disproportionately high. It would have been necessary to build such houses at a greater distance from the centre of the town, and in this way to create disadvantages for the tenants which, in their own eyes, would perhaps have seemed more important than the advantages of comfortable and wholesome houses. And if small houses for workmen had been built near to the centre of the town, the advantages of such good and cheap dwellings could only have been enjoyed by a very limited number of

families, even if no interest had been charged on the value of the ground. The more complete utilisation of the land, resulting from the erection of houses of several storeys, makes it possible to have a larger number of tenants. The comfort and healthiness of the houses is not materially diminished thereby. Each dwelling is completely separated from the others, and only half of the land has been built on, though the building regulations allow two-thirds to be covered.

For the erection of the municipal houses a piece of land was chosen which lies on streets which had to be formed on the site of the old gasworks on the southern side of the town. A part of it had already been used for municipal purposes. Another part has been made over to the Aders Trust for the erection of workmen's dwellings. Though close to the centre of the town, the land is yet not far from numerous manufactories and industrial undertakings. The part of the plot of land in question which is available for housing purposes contains one and three-fifths acres. The value of the land was taken as £9,500. This valuation may be somewhat below the true value, but it must be remembered that the town wished to take as a basis, not the highest attainable price, but the permanent value, as shown by steady house rents. The building expenses amount to about £43,800. This sum was lent by the Rheinland Insurance Institution at $3\frac{1}{2}$ per cent., and $\frac{1}{2}$ per cent. is to be paid to a sinking fund. The yearly expenses amount, therefore, to 4 per cent. on £43,800, that is, to £1,752. The town charges itself with $3\frac{1}{2}$ per cent. interest on £9,500, that is, £332 10s., and there are other charges for maintenance, loss of rent, rates, etc. The total annual cost is taken as £2,540.

Twenty houses have been built, containing 141 dwellings and seven shops. They have been occupied since the 1st October, 1901. The tenants are 80 municipal workmen and clerks, 8 post-office subordinate officials, 2 railway officials, and 50 other workmen. The houses are simply and solidly built. They are without much ornament, but still not too plain. The fronts are pleasant, the wells of the staircases are spacious. Each dwelling forms a separate whole. Every room of a dwelling, with few exceptions, is accessible from the entrance

passage, which forms part of each house. Every dwelling contains a water-closet, with a direct supply of light and air, as well as a small larder with direct light. Every dwelling has a cellar and store-room which can be locked. There are rooms for drying and washing clothes in every house, to be used by the tenants in turn. Almost all the dwellings have a simple balcony looking on to the court. There are not more than two dwellings on one storey in any of the houses.

After careful consideration the average rent for a square metre (1·1960 square yards) of floor space in the inhabited rooms has been fixed at six shillings a week. Nothing is charged for the other rooms. The tenants pay, therefore, for a fine room of 23·92 sq. yds. (say 15ft. by 14½ft.), an annual rent of £6, or 2s. 6d. a week. This rate is very moderate considering the excellent situation of the houses. In out-of-the-way streets 2s. 9d. to 3s. a week is demanded and paid for rooms which seldom exceed 17·94 sq. yds. (say 13ft. by 12½ft.).

The dwellings were occupied directly they were finished. Eight hundred applications were received. The leases, which are uniformly drawn up, forbid sub-letting and the taking of lodgers, and stipulate that the Oberbuergermeister shall, at suitable times, have the right to have the dwellings inspected, either by himself or by a deputy. Of the 141 dwellings 43 have two rooms, 85 have three, and 13 have four rooms, in all cases including kitchen.

In connection with the erection of municipal houses, of which the town was the builder, we must mention its purchase of houses which were being built and were almost finished. They cost £11,100. The poor-law administration lets them, at an average weekly rent of from 2s. to 2s. 3d. a room, to persons who, without being "poor" in the poor-law sense, have been unable, in spite of all their efforts, to find dwellings, in some cases on account of having too many children, in others on account of the reduction in their means occasioned by the house famine. In these houses there are altogether 130 rooms available, which are occupied, on an average, by from 2 to 4 persons per room.

Lately two more houses have been bought for the same objects, with 72 habitable rooms, each occupied on an average by three persons. The purchase price was £7,600.

HELP TO BUILDING SOCIETIES.

The town, recognising that private activity is especially well fitted to combat successfully a great social evil, such as the house famine, has always endeavoured to give support to the co-operative associations here. Several plots of land in the Stahlstrasse, containing altogether rather more than half an acre, were granted to the Duesseldorf Savings and Building Society, at about 25 per cent. below the real value, as sites for workmen's dwellings. Credit for part of the purchase money was given to the society at 4 per cent. interest. Towards the cost of street making the society had to pay only the cost of macadamising. And in the end the town became security, up to 90 per cent. of the value, for a debt of the society of £10,500. Building plots, containing rather more than an acre of ground, were granted to another building society, consisting of persons employed by the town, at about 20 per cent. below their value. Three-quarters of the selling price is left on mortgage at 4 per cent. interest. The society has undertaken, should the land be sold, to pay a fixed additional sum per square yard. In these two cases of the support by the town of private activity in building even the bitterest opponents of a policy of subventions will hardly be able to discover "gifts by the community, which have to be raised by general taxation, and only benefit very small numbers of the citizens."

INSPECTION OF DWELLINGS.

Of an essentially different kind, but hardly less important, is the activity of the Town Council in its capacity of controller of the power of the police. Though we must not fail to recognise that the struggle against evils in the dwellings system ought to be entirely a matter of voluntary effort, still careful police supervision can effect much improvement. The obstinacy and indifference which are the result of inveterate prejudices can only be removed in this way. It is a difficult task for the

executive officials, and requires much patience and knowledge of mankind on their part, to superintend dwelling-houses, to decide what ought to be done, and to bring about the removal of evils. A "police-manner" must be carefully avoided. Then the police authorities have always to remember that they can create no dwellings; and, therefore, in cases where dwellings may have to have their occupants removed by compulsion, they must think at the same time where the ejected people are to go to. The state of the dwelling market must be taken into consideration, and the authorities must keep in touch with the agencies which create dwellings.

Since 1896 there have been police regulations for the town-district of Duesseldorf, issued by the Government, respecting the condition of dwellings in those houses which are intended for occupation by two or more families. These regulations give the local police authorities the right, in cases which are fully described, of declaring a dwelling-house to be "unfit for occupation" or "overcrowded." In either of these two cases no one, not even the proprietor, may move into the dwelling, or admit a family as tenants or sub-tenants, without permission from the police. Disregard of the regulation is punished by the police. As the police authorities, in exceptional cases, can withhold the declaration that a dwelling is unfit for habitation or overcrowded, they are able to bring the regulations into force gradually, and thus to ensure that they do not increase the scarcity of dwellings, nor raise house rents, nor inflict hardship on landlords or tenants. Up to the 1st November, 1901, the work of discovering and dealing with defective dwellings was carried on by the district police-sergeants,—experienced officials, who have had charge of the same districts for many years, and who are exempt from the ordinary duties of a policeman. They made detailed reports. The dwellings unfavourably reported on were inspected again by a specially qualified police-sergeant, who was freed from all other work. Only if his report was unfavourable, did the administration take action. In the majority of cases the defects were removed by amicable agreement.

Since the 1st November, 1901, a Dwellings Commission has

been at work. It consists of the Adjoint (salaried member of the Town Council), who has control of the police department, the Town Surgeon and the Surveyor of Buildings. The Commission acts through a municipal building-assistant, who has only to attend to dwellings, and the police-sergeant who formerly had charge of them. Since the 1st November, 1901, until the end of March, 1902, these officials inspected 1,290 dwellings. Cause for complaint was found in 434 of them. Up to the 1st April, 1902, 275 of these cases had been decided. In 156 cases the dwellings were emptied, and in the remaining 119 cases the causes of complaint were removed. The comparatively large number of dwellings complained of is explained by the fact that the inspected dwellings, almost without exception, are in the oldest part of the town, between the Akademie and the Muehlenstrasse.

During the last few months (since about May, 1901) the regulations have been rather more strictly enforced. The fear of causing families to be homeless has disappeared, because the cessation of activity, which has occurred in many branches of industry, has diminished the crowding together in one place of many poor families. It has therefore been thought that the time has come to empty, by threats of legal action, all dwellings which, after very careful examination, have to be condemned as "unfit" or "overcrowded," and in which no improvement is made within the ample time allowed for the purpose. This policy is made free from legal objection by the authority given to the police by the general law and the police regulations. And in Duesseldorf, as elsewhere, experience has proved that the beginning of the systematic regulation of dwellings can only be effected by local by-laws. If the system works well, if the authorities and citizens are familiar with its administration, a bolder advance becomes possible and advisable, which, in the absence of other legislation, can be adequately based on the general law of the land. In several cases whole houses were emptied without causing a single complaint. The circumstances were such that everyone was obliged to admit that the authorities, though they were not loved, were in the right. In these cases it was chiefly a question of houses in the oldest part

of the town, which could no longer be regarded as fit to be human dwellings, but which were still let at usurious rents to the poorest people by careless and selfish owners. The tenants in question were placed, by the help of the police, in suitable houses then standing empty, and were assisted with money by the poor-law administration.

On the whole, thanks to the fact that its houses are not built close together, Duesseldorf is not overburdened with unhealthy quarters. There are only a few streets in the old town which need much improvement. Recent experience has brought the attainment of this object considerably nearer. Increasing insight into the gravity and fundamental importance of the dwellings question will, it is to be hoped, produce its effect; and the action of private citizens will complete the task which the authorities partly accomplish by means of compulsion.

Besides this direct action of the police on housing conditions, which may be shortly described as "dwelling-house inspection," the Town, as head of the police authority, has further means at command for the improvement of those conditions, in their building regulations. The existing regulations are briefly described below.

The Town Council has one more organisation, created only in the last few months, which must at least be touched upon in this connection. It is known that dwelling-house policy is essentially land policy. Houses do not become dearer because the owners are particularly ill-natured people, as a well-known expert has said, but their rise in price is inextricably involved in the rise in the price of land, brought about by our land law, which has been injuriously influenced by the Roman law.

In the spring of 1901 the Prussian Ministers of Religion, of the Interior, and of Commerce, declared with admirable distinctness that the adoption by towns of a suitable land policy is of the greatest importance for the improvement of dwelling-house conditions. As effective means they have recommended the purchase by the towns of as many plots of land as possible. The Municipal Government of Duesseldorf has considered this idea since the end of 1900. By the formation of an independent department, the Land Fund, described on pp. 85—90, it

has created the possibility of acquiring plots of land, even when they are not needed for immediate use. In this way it perhaps becomes a speculator in land, but only in a right way. Speculation can only be vanquished by speculation. Pains will certainly be taken to avoid action on too large a scale, and rash purchases which might be regretted later.

THE ADERS TRUST.

Another kind of work, which was not initiated by the Town, but is now under the control of the Town Council, has for its object "the erection of workmen's dwellings, in which respectable families of mill-workers and other citizens of the poorer class, who do not receive poor relief, may find suitable homes at low rents." This is the wording of the will of the late Judge D. Aders, by which he bequeathed half his fortune of about £100,000 to the town of Duesseldorf. By this generous gift the Town is enabled to provide cheap dwellings, not only for the present, but for the future also. For, according to the will of the founder of the trust, the rents are to be allowed to accumulate, and to be always used for the erection of additional dwellings. There is a great demand for the dwellings of the Aders Trust. Generally, long before a set of new houses is completed, there are far more applications for them than can be satisfied.

In the period from February, 1892, to the summer of 1900, the Trust acquired 42 houses, which are scattered all over the town. They contain 257 dwellings; 17 of the dwellings contain four rooms each, 122 three, and 118 two rooms. On an average, each household consists of 4·9 persons. Each room has, on an average, 1·8 occupants. With the exception of the dwellings in one old house in the oldest part of the town, every dwelling has a separate entrance-passage. The average rent per room is at present 1s. 5½d. a week. Rooms equally good can with difficulty be obtained in private houses at less than 2s. 6d. a week. The rents charged are therefore too low, and do not correspond with local conditions. An increase of from 10 to 15 per cent. is therefore inevitable. But, even if raised to

1s. 7½d. a week, the rent will conform to the directions of the will in being "low."

The trust now amounts to about £82,500, of which £75,000 is represented by dwellings and their sites. The net income from rents is £2,500, so that 3 per cent. interest on the capital invested is obtained.

THE PROMOTION OF "OPEN" BUILDING AND OF THE BUILDING OF SMALL HOUSES.

By a resolution adopted on September 6th, 1898, the Town Council has encouraged the formation of streets of detached and semi-detached houses and the building of houses for one or two families. The resolution is: For streets (a) in which persons erecting buildings undertake to erect only dwellings, and only dwellings not having more than one storey above the ground floor, (b) in which persons erecting buildings undertake to erect only detached or semi-detached houses, to the exclusion of factories, the general regulations shall be altered in the following points: (1) The contribution to the cost of the public sewers will be reduced by one-half; (2) the persons building will pay towards the cost of making the street only the cost of macadamising it. Moreover, in the case of the streets referred to in (a), it is probable that, where the circumstances make this possible, the width of the road will be reduced to 11 yards, and, if there are houses on only one side of the road, to 10 yards.

Happily it has been possible, on the basis of this resolution, to promote an undertaking, the object of which was to create a "villa colony" of considerable size. The firm of Friedrich Woker and Son made plans for a plot of ground of about 46 acres before any buildings were erected on it, with a view to having it reserved entirely for small villas (detached and semi-detached houses). Three hundred sites are provided, 13 of which, in one separate block, are intended for business houses. More than half the sites are already sold. By May, 1902, about 30 houses will be completed and occupied. The development must be regarded as very rapid, seeing that the whole tract of land in February, 1901, was plough land and pasture without any roads on it. In this way "open building" is obtained for

one district without the exercise of any police influence. The new part of the town will serve as an example, and probably lead to the existence of other enterprises of a similar kind.

These considerations led the Town Council to facilitate the opening of, and building on, the estate in every possible way. After the construction of main drains to the villa colony, on which the Town has so far spent £8,150, the making of roads, and provision of water-pipes and gas-pipes, the estate, which is low-lying and used to contain much water, will provide wholesome building sites. These works were begun in March, 1901, and will be completed in May, 1902. The open situation and the view of the Grafenberg Wood are among the attractions of the estate. At the wish of the promoter special building regulations were issued for the estate. The sites, as is the case in all that part of the town, may not be covered to a greater extent than one-half; only two families may occupy one house; each house must have only two storeys; the buildings must not be more than $42\frac{1}{2}$ feet high, or more than 49 feet from back to front; and there must be a distance of 10 feet between each two houses. These regulations ensure that the settlement shall have the character of a villa colony. As timber framing is allowed in the house fronts, they can be made of villa character. All the house fronts must receive the approval of the Town Council. It remains to be seen how the enterprise will develop, whether so promising a beginning will be worthily continued. In any case, the work, as an attempt to do voluntarily what otherwise could only have been attained by the exercise of compulsion, deserves all respect.

RESTRICTIONS ON BUILDING.

The older building by-laws of the town were very timid in imposing restrictions on building, but about 1890 it was found necessary to limit the degree, to which the utilisation of sites might be carried, by regulations respecting the proportion of each site to be covered with building, respecting the number of storeys permitted, and respecting the height to which building round courts might be carried. (The height of buildings on streets had been limited as early as 1874 by the adoption of the

usual rule that their height must not exceed the width of the street.) The rapid increase of population and the growth of the commercial and manufacturing importance of the town had greatly raised the value of land. A fuller utilisation of sites by increase in the height of buildings could be prevented only by police regulations. But regulations of the kind were published in good time, so that the town will keep its traditional open character. This is an advantage which will be recognised even by those who, true to the principle of *laissez faire*, object to all restrictions on building. The building by-laws of March 1st, 1898, now in force, distinguish between an Outer and an Inner District. In the Inner District only two-thirds of the area of each site may be built over, in the Outer District only half. Mitigations of the by-law are allowed in the case of corner plots. On the other hand, the by-law is made more severe if dwellings are erected at the back of other buildings. In that case sites in the Inner District may have only half their area covered, and those in the Outer District only one-third. The height of the front walls of back-buildings and side-wings must not exceed the width of the court in front of them by more than 16 feet. No building in the Inner District may be more than $65\frac{1}{2}$ feet in height, and no building in the Outer District more than $52\frac{1}{2}$. The number of storeys used for dwellings must not exceed four in the Inner and three in the Outer District. Buildings with back-dwellings are subjected to more severe restrictions. There are detailed regulations to ensure a sufficient supply of light and air, and to prevent damp and other noxious influences. The floors of rooms intended for continuous habitation by human beings must not lie more than 30 inches below the ground, and those of back-dwellings must be at least three inches above the level of the court. Finally, the Town Council try to keep four separate parts of the town free from all offensive trades.

BUILDING SOCIETIES.

In conclusion, a few words must be added to what has already been said respecting the private societies which concern themselves with the housing question. There is in Duesseldorf

a building society whose members are servants of the town. It built 40 dwellings in the year 1901. The total number built by it is 59. Nearly all its dwellings are small, and, according to the testimony of all the tenants, the dwellings are in every way satisfactory in respect of arrangement of space and equipment. And the rents are moderate. The Duesseldorf Savings and Building Society in the three years of its existence has built dwellings for 93 of its members,—for each of 32 members a dwelling with three rooms, and, for each of 60, a dwelling with two rooms. It has also one shop with one room attached, and 54 attics which serve as additions to the dwellings. This society, like the other, has had the satisfaction of finding that the dwellings are kept in good order, that peace and unity are maintained amongst the tenants, and that the good arrangement and good construction of the dwellings are much appreciated. This society has made it its chief object to build model dwellings. It tries, by separating each, even of the dwellings with only two rooms, from all the other dwellings, to make each of its members independent of all the other occupants of the house, and in this way to bring the tenant of a large tenement house as nearly as possible into the condition of a man who lives in his own house.

The last report of this very useful society shows clearly that building societies, aided by the advice and encouragement of intelligent Town Councils, and supplied with adequate capital at low rates of interest, may do very much towards supplying the solution of the housing problem. We therefore translate a summary of the report from the *Zeitschrift fuer Wohnungswesen*, of July 10th, 1903:—“The Duesseldorf Savings and Building Society has to record exemplary achievements in the erection of small dwellings. The area covered by its buildings contains 1 acre and 176 square yards, while the sites contain $2\frac{2}{3}$ acres. In the business year just ended the society has increased the number of its dwellings by 69. In addition to the dwellings containing two and three rooms which it has hitherto built, it has now added six dwellings with four rooms in Schinkel Street. This property, which comprises four houses containing 32 dwellings, and which required

a capital expenditure of £10,000, was built by aid of a loan of £9,500 from the National Insurance Institution, made under the guarantee of the town of Duesseldorf. The loan is to be repaid by a sinking fund at $1\frac{1}{2}$ per cent. Four other houses for 30 families were finished in the year. Twenty-eight dwellings are being built on newly-acquired land near the Bilk Station. With these, there will be 25 houses, containing 172 dwellings. The financial position of the society is very good. Its house property stands in its books at £41,500, and is debited with £35,500. After payment of the net profit of £335, the reserve fund amounts to £2,225, and the society still has £1,800 of uninvested capital. It has now 550 members."

The Society for the Provision of Dwellings does not concern itself with the building of dwellings, but with obtaining sufficient dwelling-room and the proper equipment of dwellings. It works in close touch with the poor-relief administration, and completes the work of that body in the most useful way.

ULM.

Ulm, in the year 1900, had a population of 42,997. Its Oberbuergermeister is appointed for life. The present Oberbuergermeister has been in office since 1891. He receives a salary of £600. The following account is translated from a summary, published in *Soziale Praxis*, of June 25th, 1903, of a book* on "The Action of the Town of Ulm in relation to the Provision of Dwellings for Workpeople and Officials," by the Oberbuergermeister of Ulm, Herr Wagner.

THE BUILDING OF DWELLINGS.

Ulm, as the author mentions in the introduction, is the only town in Germany, except the small town of Lambrecht in Bavaria, which has for a considerable number of years continued to build dwellings for workpeople for sale to the

* Die Taetigkeit der Stadt Ulm auf dem Gebiete der Wohnungsfuersorge fuer Arbeiter und Bedienstete, von Oberbuergermeister Wagner. J. Ebner, Ulm, 1903. Price 3s.

occupants, with restrictions on their right to re-sell for the prevention of speculation with the buildings, and which possesses a considerable amount of experience of the results of a system of the kind. It was in the year 1888 that the Town Council began to deal with the housing question. In that year it built a house, containing 21 dwellings, for the persons employed by the town and by its public institutions. As the experience gained with this house was unfavourable, a joint-stock building society, composed of manufacturers and capitalists, was formed in 1891 by the initiative of the Town Council. From that date till 1897 the society built 18 double houses of several storeys, in which 360 persons found dwellings at moderate rents. But the means of the joint-stock society proved to be insufficient for effecting a thorough improvement of the housing system in the town; and, moreover, all the inconveniences which are necessarily connected with housing a large number of families in buildings of three and more storeys soon showed themselves. These experiences induced the Town Council to take action itself again. In 1894 it had already resolved to begin by building 16 double houses on a plot of land belonging to the town (Untere Bleiche), and to make them over to members of the working-class on special conditions of sale. This involved a decision in favour of one-family houses and against barrack dwellings. From that moment the Town Council began to be increasingly active in providing houses. In the year 1896 16 double houses were built, in 1899 33 more double houses, and in 1902 a fourth series were built, and plans for a fifth series prepared. Each house is provided with a yard, a garden and a front garden, and is intended, as a rule, for occupation by only one family. The possibility of letting off the upper rooms is, however, provided for. With a view to this, the majority of the houses are of only one full storey, with a room in the roof. Only on the principal streets of the groups of houses are there buildings with two full storeys and rooms in the roof. Each of these last-named buildings contains three dwellings. All the houses are built in pairs. Each dwelling contains two or three chief rooms with all necessary additional spaces. The conditions of sale are so

framed as to enable the Town Council to prevent usurious use of the houses, the raising of rents, and neglect and injury of the dwellings. The conditions include the right of repurchase for a hundred years and the fixing of maximum rents by the authorities of the town. Only married persons, or widows and widowers with children, are allowed to become purchasers. Families with many children receive a preference. Politics and religion make no difference.

The Town Council have found that they can build more cheaply than a society can, and that their management of dwellings is not more costly than that of a society. The funds needed have been obtained without difficulty from the State Savings Bank in Ulm and the State Insurance Institution of Wuerttemberg. The purchaser, to whom his house is sold at cost price, has to pay 10 per cent. of the price in cash, and to pay interest at 3 per cent. on the remainder, and $2\frac{1}{2}$ per cent. to a sinking fund. When 50 per cent. of the price has been paid the purchaser can cease to make payments towards the cost of his house. In cases of illness, and in other exceptional circumstances, the postponement of payments for a time is allowed; and, besides this, the hospital authorities make so-called "sustenance loans" to the workpeople who live in their own houses. The experience which the Town Council has had with the purchasers of houses has been, on the whole, extremely favourable. The possession of homes of their own has had an unmistakable good influence on the purchasers in developing thrift, orderliness, and care for their families.

LAND POLICY.

The action in relation to housing taken by the Town Council has been much facilitated by the policy which they simultaneously adopted respecting land, a policy which is carefully described in the Oberbuergermeister's book, and which has had for result that to-day of all the bulding land in the town district, 1,128 acres in extent, $697\frac{1}{2}$ acres, or more than three-fifths of the whole, belong to the town and its public institutions, and that, in consequence of its favourable position with regard to the possession of land, the town can control the plans for its

extension and for its future development. And the Town Council, by the re-sale of not quite one-sixth of the land which it has bought since 1891, has recovered about nine-tenths of all that it expended on the land. The Council's purchases, therefore, have been commercially very successful, although the prices charged by it to all purchasers have been fixed so low that strict conditions for preventing speculation, and for having a good influence on the methods of building to be adopted, could be made in the case of all sales of land, including those for mills and houses.

BUILDING BY SOCIETIES AND PRIVATE EMPLOYERS.

The author next speaks of the action, respecting the building of dwellings, of two savings and building societies which have meanwhile been created, and of that of private employers. The Town Council has helped both classes of builders by letting them have building sites at reduced prices. The older of the two building societies has become very active, and the author fully recognises the zeal and the self-sacrificing devotion of the working men members to the work of their society, but, on the other hand, he mentions that, as he shows in detail, the action of the society proves that the economic powers of workmen, and their knowledge of business, and their experience, often do not suffice to make the principle of self-help successful.

The Town Council is convinced, by the results of the experiments which it has made, that it is on the right road. It intends to continue the work which it has begun actively in the future, at first by erecting additional sets of dwellings for workpeople; and, when all the applicants who are able to pay an instalment of 10 per cent. of the price are provided with dwellings, it will provide houses for, and give the right to continuous occupation of them to, all who are willing to save money till they are able to pay an instalment of 10 per cent. The author then examines and refutes all the objections which have been made to the building of dwellings by a Town Council for sale to the tenants, and in conclusion makes a short statement respecting what has been done in Ulm since the year 1888 by the Town Council, private employers and building societies to supply

dwellings. In that period of time, at a cost of about £117,000, 216 houses for workmen and for persons employed by the town have been built, which contain 526 dwellings, and have about 2,600 inmates. For a town which, if the large military garrison be not counted, has a population of only about 30,000 persons, this is a notable achievement.

The author, in conclusion, indicates that the chief object to be sought in the reform of the housing system is the enabling of workpeople, and all members of the poorer classes, to obtain houses of their own; and he roughly sketches the parts which he thinks that the great corporate societies, the Empire, the separate States and the Towns should take in the solution of the problem.

The pioneer work of Ulm certainly means a distinct advance in the direction of the solving of the housing question, and the result of its enterprise proves that the most ideal system of house provision, the system of houses owned by their occupants, is possible in most towns, if energetic and far-sighted men are at their head, and if in the past their Town Councils have not been guilty of too much neglect of the duty of obtaining land, or if the circumstances of the town are not very exceptional. The experiences of the town of Ulm are important and instructive, not only for social science as such, but especially for the practical applicant of social science, and for the large number of towns in which the housing question is constantly becoming more serious.

The experiment carried on in Ulm is so full of practical instruction for English towns that we add to the article from *Soziale Praxis* a translation of some paragraphs of Ober-buergermeister Wagner's very interesting and valuable book.

KRUPP'S DWELLINGS AT ESSEN.

When the Town Council of Ulm had resolved, owing to the comparative smallness of the results obtained by the Building Society, that it would itself build dwellings for workpeople, it appointed a committee to inspect houses which had been built

for, and sold to, their workpeople by the great firm of Krupp, of Essen;* and the examination of the dwellings at Essen confirmed the decision of the Town Council to allow the houses they were about to build to be sold, under the conditions already mentioned, to workpeople. Herr Wagner says: "At Krupp's it is very evident what the meaning of the ownership, as compared with the renting, of a house is for family life, cleanliness and orderliness, thrift and morality. Who, after a careful examination of Krupp's workmen's dwellings, would deny that the dwelling of the workman, who lives in a house of his own, shows a higher average of comfort and cleanliness, and is better furnished, than the rented dwelling? In the very first house belonging to its occupant which the Ulm Committee entered this difference was noticeable. There were flowers in the windows and snow-white curtains, passages and stairs were as clean as possible, fireplace and utensils in the kitchen were brightly polished, in the sitting and bedrooms stood neat, if simple, furniture, and even a modest piano was not wanting. And when the Committee complimented the housewife on the great cleanliness and comfort of her home, her eyes brightened as she said from the bottom of her heart, 'Yes, and it is our own property.' The visit to Essen left the Committee with the belief that 'Love of home and fireside, joy in family life, pleasure in work, all have their roots in a good and wholesome dwelling, and most of all in a dwelling of one's own.'"

HOUSING POLICY.

When the first set of dwellings erected on the new system had been occupied for some time by the workpeople to whom they were sold, and the Town Council had decided to build and sell a second set of dwellings, a series of resolutions were passed

* This great Firm, which in December, 1901, employed 25,016 workpeople, had by that date built 4,274 dwellings at a cost of £894,000. In May, 1900, 26,678 persons lived in houses built by the Firm. The development of the housing system at Essen is described in a small book published, at the price of 1s. 6d., by Fried. Krupp in 1902, "Die Entwicklung des Arbeiterwohnwesens auf der Gussstahlfabrik."

by the Town Council, of which we translate some parts:—
“The beginning made by the town with the erection and sale of workmen’s dwellings is incontestably most satisfactory. The doubt, which was at first suggested, that no persons would be found who cared to buy the dwellings, is entirely removed, and the demand has been proved to be greater than the supply, and precisely from those classes for whom the supply was intended, viz., workpeople employed in manufactories, small craftsmen, and the lower class of officials. The owners of the newly-built dwellings are all contented with the arrangements, and family life is most favourably influenced, while the sanitary side of the undertaking cannot be rated too highly. That the need for good small dwellings is not yet exhausted is made evident by the continuance of the house famine and by the statistics of the last census. It must be again emphasised to-day that the provision of good dwellings for the poorer classes is the most important of the social measures of our time, and will be more fruitful of good than many other alleviations, which are certainly equally desirable, but less urgently needed. Whilst the abolition of house duty, of schoolpence, and of taxes on articles of consumption, not unfrequently is an advantage only to the head of a family, the improvement of the dwelling raises the conditions of life of the whole family, as husband, wife and children are helped by it, outside and inside. For these reasons and those which have been mentioned earlier, it is desirable to advance energetically on the road which has been already taken, and to make the possession of a house possible, not only for those persons who can pay a first instalment of 10 per cent. of the purchase price, but also for those who are prepared to save till they have accumulated the 10 per cent., and for whom the right to buy the house occupied by them should be reserved.”

In choosing the site for workmen’s dwellings the Council took account of the need of not separating the various social classes of the community. They therefore placed the workmen’s dwellings in a part of the suburbs where it would be possible, and where the Council intends, to erect a number of new houses for members of the middle class. Great care was also taken

to so place the dwellings as to ensure that they should receive as much sunshine and air as possible. Of the site used

20% is covered by the buildings,
30% by streets and front gardens,
17% by streets alone,
13% by front gardens alone,
50% by back-gardens and yards.

SALE OF DWELLINGS.

Herr Wagner shows that, as the Town Council has the right to re-purchase every house which it sells, at a price, in the fixing of which the land used as a site must be taken at the value at which it was taken when the price paid by the purchaser was fixed, the system adopted ensures, as fully as does the system of selling on chief rent, that the town shall get the advantage of any advance which takes place in the price of land. And he also shows that, as a workman who has bought one of the houses erected by the Town Council, if he wish to sell his house, can always sell it to the Town Council should he have any difficulty in finding another purchaser, the new system is as convenient for workmen as that of renting houses.

Those workpeople who have applied to purchase houses and have had their applications approved of, and who have the instalment of 10 per cent. of the price of a house ready, are allowed to lend the 10 per cent. to the Town Council, and to receive interest at the rate of 4 per cent. on it, until houses are ready for them. Not a single case has yet occurred in which the purchaser of one of the Town Council's houses has sold his house, unless he were compelled to leave Ulm. Although workpeople with many children, the class who receive a preference in connection with the Ulm dwellings, are just those who have the heaviest death-rate, the death-rate of the 842 persons who occupied the Ulm dwellings in 1901 was only 13·06 per 1,000 in that year; and the death-rate of the 1,060 occupants of the houses in 1902 was only 12·2. To lessen the death-rate of children, the Town Council of Ulm is about to sell sterilised milk.

LAND POLICY.

Respecting the possession of land by a town, Herr Wagner says :—" The Town Council of Ulm had always been convinced that the provision of workmen's dwellings on a large scale—for the attainment of the object aimed at in Ulm, the creation of houses to be owned by the workmen occupying them—could be accomplished only if the town was possessed of the largest possible amount of land; and, further, that the maintenance and systematic increase of its land involved other gains also which must have a favourable influence on the interests of the whole community, and, amongst others, on the housing question. It is not only that the possession of much land enables the town to create such institutions as public parks and gardens, playgrounds and skating places, children's gardens and gardens for schools, allotments and lakes, etc.; it also puts the town into a position to have a good influence on the development of the town in relation to social, hygienic and architectural needs, to attract sound industrial undertakings which are likely to develop and to add to the welfare of the town, and to discourage the establishment of unsound undertakings, to restrict unwholesome speculation in land and buildings by exercising a moderating influence on the price of the land, and to secure for the town the increase in the value of land."

In addition to the amount of land in the Ulm district mentioned in the article from *Soziale Praxis* on p. 105, as belonging to the town, Ulm possessed, in 1891, 2,926 acres outside the town boundaries. Owing to the success with which it has managed its land, although Ulm has spent large sums of late years on new schools, a cemetery, sewers, new streets, improved pavements, additions to salaries of teachers and officials, its rates have not increased, and are far lower than those of other towns in Wuerttemberg, in which similar outlay has led to a great increase in the rates. As an example of the sagacity and energy shown by the Town Council of Ulm in their management of the affairs of the town, it may be mentioned that, having lately bought from the Prussian Government the site of the inner line of fortifications of the town, and obtained

permission for the removal of the fortifications, and thus made available for building a large amount of land belonging to private persons, on which building was formerly not allowed, and the value of which is therefore very greatly increased, the Town Council have obtained from the Government of Wuerttemberg the power to cause the owners of the land to pay to the town part of the increase in the value of their property caused by the action and outlay of the Town Council. According to the position of their land the owners have to pay from £12.9s. per acre to £124. 18s. per acre.

FUTURE ACTION.

The resolutions, respecting further action with regard to building houses for workpeople and the purchase of land, formed by the Town Council of Ulm, after careful consideration of the results obtained by what they have already done, and after consultation with Professor Baumeister, of Karlsruhe, Mr. Koelle, of Frankfurt-am-Main, and Mr. Stuebben, of Koeln, the highest authorities in Germany on the extension of towns, deserve thoughtful examination by all English Town Councils. The Council has resolved to build for 50 more families this year, as a large number of workpeople desire to buy houses; and to continue building houses to be sold to workpeople in proportion to the increase in the industries of the town; and the Council will not cease to build, until, not only all the workpeople who can pay an instalment of 10 per cent. of the price of a house are supplied, but, too, all those who are prepared to begin to save towards paying the instalment of 10 per cent. In this connection Herr Wagner points out that, as the rents of the houses built by the Town Council are considerably lower than those charged in Ulm for other houses with an equal amount of accommodation, the difference of rent will soon pay the instalment of 10 per cent.; while, if the tenants are able to make further savings, the interest of 4 per cent. per annum paid by the Town Council on sums received from workpeople who intend to purchase houses, will give them additional help towards obtaining the amount of the first instalment.

With regard to land, the Town Council has resolved to continue to add to the amount already held by the town, carefully observing the principle that their action must not cause a serious increase in the price of land.

NEW BUILDING BY-LAWS.

The Town Council has also resolved that in the new building by-laws, which they are preparing for the whole area which will be covered by the town with its intended extensions,—by-laws which will be accompanied by a building plan for that area—care shall be taken that the supply of light and air for the inhabitants of the new parts of the town shall be as complete as possible; that, with the closest possible observance of the proposals made by Professor Baumeister in his “Normal Building Laws,” care shall be taken that the amount of land covered by building in each part of the town shall bear a proportion to the amount of land left uncovered which shall be in accordance with the kind of use made of that part; and, finally, that there shall be a reduction of the height of buildings hitherto allowed by the building laws.

DUTY OF TOWNS TO ENSURE WHOLESOME HOUSING.

In the course of a very interesting discussion of the various objections which have been made to the building of dwellings by Town Councils, Herr Wagner points out that the acceptance by a country of the principle that every needy citizen is entitled to have shelter provided for him by those whose duty it is to give relief to the poor, makes it quite reasonable that public authorities should give direct help to those who are in need of wholesome dwellings; and he claims for the Town Council of Ulm that it has proved that a town is not only called on, but is also able in the best possible way, and the way which is most conducive to the public welfare, to solve the Housing Question, or, at any rate, to do much towards solving it. He mentions that, at first, some of the professional builders in Ulm disapproved of the action taken by the Town Council, but that, when the results of that action became generally known, all

objections disappeared. In the Town Council itself there were at the beginning members who objected to the proposal to build, but the results obtained were so good that the proposal to build the second set of dwellings had the unanimous support of the Council; and the existing policy of the Council still has the support of all the members of the Council.

In commenting on the objection, so often urged, that, if the Town Council builds houses for workpeople, it prevents employers of labour and building societies from building such houses, Herr Wagner asserts that just the opposite has taken place in Ulm, that the example of the Town Council has had the effect of inducing employers and building societies to take the work of building workmen's dwellings in hand with great energy; and he further asserts that the report of the results of an examination of the condition of the other towns in Wuerttemberg published by the Finance Assessor, Dr. Truedinger, shows that in the towns, in which the Town Councils have not taken the initiative in building houses for workpeople, no, or very few, houses of the kind have been built by private persons. He shows, too, that the financial credit of the town has not suffered in the least, and that the Town Council has had no difficulty in obtaining funds; and that no risk of loss has been run, as so many workpeople have been eager to buy houses that, practically, the Council has only built to order. He believes that in a town, where a large proportion of the inhabitants own the houses which they occupy, economic depressions will cause far less danger than in other towns where the renting system prevails; and he asks: "Does not a workman's family which owns a house, even if the house be only partly paid for, a family in which thrifty habits and orderly family life are fully developed, not offer more security that the community will not be burdened with its support than a family which owns nothing at all? Can there be a safer, better, more convenient investment for a workman's savings than a house built on the Ulm system, to be bought by the man who occupies it, especially if, as is the case in Ulm, the occupant in case of need can obtain loans on the payments which he has made?" In reply to the objection that building

houses attracts people who have no means to the town, Herr Wagner shows that the amount spent on poor relief has fallen since the Town Council began to build houses, and that the workpeople attracted by the houses have been of greater value to the town than several millionaires would have been. No charge on the rates has been caused by the Council's building operations, unless the selling of land at a low price be held to involve such a charge, and no land has been sold at a price below that paid by the town.

The conditions on which the houses are sold ensure that purchases are completed in 23 years. Herr Wagner shows that in towns, where land is dearer, it would probably be advisable to let the purchase extend over a period of perhaps 38 years. He maintains that "a Town Council, which works with foresight and regard for economy, and in which experts and administrators mutually help each other, can provide a working man with a house which costs him less than a house for which he pays rent." Although the Town Council still believes that some advantages are gained by building small houses with rooms which, while the owner's children are too young to work, can be let to another family,—houses, that is, of the kind last built by the Town Council,—it now believes that the best plan is to build small houses which, even when children are quite small, shall be occupied by only one family; and it intends that the houses built by it in future shall be of that kind, Herr Wagner asserts that it is possible for a Town Council to supply workpeople with such houses in every town, in which the Town Council begins in good time to take part in a housing policy.

DUTIES OF EMPIRE, STATE, AND TOWN RESPECTING HOUSING.

At the close of his book, Herr Wagner indicates the shares in the great work of making full healthy life possible for the people, which he believes should be undertaken by the Empire, by each of the States composing the Empire, and by each Town Council respectively. In this country, if the system which he recommends were adopted, the State would, of course, have to

take the shares he assigns to the Empire and to the separate State. He believes that the task of the Empire should be:—

(a) Use of the Empire's credit for the Town for the purposes of building houses to be sold to workpeople, of getting rid of unwholesome houses, and of erecting lodging-houses for men and for women, and for lending money on existing houses owned by workmen, the right to purchase which should be granted to the town. It seems advisable to make the Empire responsible for providing funds, because experience has shown that many of the National Parliaments are more afraid to grant large sums of money than is the Imperial Parliament.

(b) Creation of an Imperial Housing Department with a view to the regulation of the credit to be granted to towns for the purposes mentioned under (a), and to the settling of the principles on which loans should be made, superintendence of the expenditure of the loans granted, and the introduction of general enquiries respecting housing conditions.

DUTIES OF THE STATE.

(a) Issue of building laws, relating to the number of persons allowed in dwellings, and the degree to which sites may be covered with buildings in the different zones or divisions of towns.

(b) Regulation of the inspection of dwellings.

(c) Issue of laws relating to the empowering of towns to levy rates on the increment of the value of land, to the right of the community to expropriate property, to the redistribution of small sites, and the taking part of them for the construction of streets and open spaces, and to the making of short lines of railway between town and suburbs.

(d) Increase of self-government of towns.

DUTIES OF THE TOWN.

(a) Preparation of town extension plans for the widest area to which building will extend, and preparation of building by-laws for the different districts or streets of the town.

(b) Maintenance and increase of the land belonging to the town.

(c) Levying taxation on the augmented value of land.

(d) Building of dwellings for workpeople and officials, especially of houses to be sold to the occupants of them.

(e) Creation and development of facilities for traffic between the outlying parts and suburbs of the town and its centre, and the eventual taking over of all means of transit by the town into its own management.

(f) Erecting of lodging-houses for workpeople and domestic servants, and connection of registry offices for women-servants with the lodging-houses for women.

INFLUENCE OF ULM DWELLINGS ON THEIR OCCUPANTS.

Herr Wagner quotes the following passages from a book on "The Provision of Dwellings for Workpeople by Communities," by F. Ludwig: "The gardens attached to the houses in Ulm, which have been sold to workmen, are cultivated with great diligence by their owners, and are so productive that they supply almost all the vegetables which are needed. Great attention is also given to the small front-gardens, which, used for flowering plants, give the whole colony a bright cheerful look. If one enters one of the houses in the new quarter one is surprised at the neatness which is everywhere visible. Even in the houses of the poorest people there is a wholesome cleanliness, which is in strong contrast with the close and gloomy rooms of the inner part of the town, where working people live. The contented faces one sees show a reflection from this beneficent orderliness, and if one strolls in summer through Romansdorf, as the quarter is now called by its inhabitants, and notices, here a workman's family taking their evening meal in their summer-house, there the father at work in the garden, while healthy children's faces, not thin and pale, such as one sees in the dark parts of towns, but cheerful and happy, beam towards one, then one no longer needs any politico-economical arguments to prove that housing reform is required."

GOOD GOVERNMENT OF ULM IS RESULT OF GOOD SYSTEM OF MUNICIPAL GOVERNMENT.

It is hardly necessary to say that the admirable work accomplished in Ulm would not have been possible, were it not that the Mayor and some of his colleagues in the Town Council have held office for many years, and have been enabled by the receipt of salaries to give all their working time to the service of the town.

It has been announced recently (*Soziale Praxis*, August 6, 1903) that the Town Council of Ulm, in view of the continued and increasing deficiency in the town of lodgings for unmarried men and women of the working class, has decided to provide a sufficient number of municipal lodging-houses, beginning with one on the east side, and one on the west side of the town, and has appointed a committee, of which Herr Wagner is chairman, to study the arrangements of the municipal lodging-houses in Heilbronn.

WORKMEN'S DWELLINGS NEAR STUTTGART.

An important contribution towards the solution of the housing question in Germany has been made by the Association for the Good of the Working Classes (*Verein fuer das Wohl der arbeitenden Klassen*) in Stuttgart, which, in addition to doing much other useful work, has built good houses, surrounded by ample open space, for about 700 families on a carefully chosen site at a distance of about a mile and a quarter from the centre of the town. Nearly a hundred of the houses are sold to tenants on a thoughtfully prepared system, which, while enabling the purchaser to gain the ownership of a house very soon, allows him to pay for it slowly, and secures to the Association the right of pre-emption. The work of the Association merits most careful examination by English people who desire to ascertain what lessons Germany can teach us respecting housing, not only because it is exemplary in many ways, but also because it has been very thoroughly described and illustrated by Mr. Eduard Pfeiffer in a book * which supplies just the kind of information

* "Eigenes Heim und Billige Wohnungen," von Eduard Pfeiffer, Stuttgart, Konrad Wittwer, 1896. Price 3s.

which an English student of German methods most desires to obtain, and generally finds it most difficult to obtain.

INFLUENCE OF STUTTGART BUILDING-PLAN.

When the Association bought the site for the new "colony" which it intended to build, the Municipal Government had not yet prepared a building-plan for that side of the town, and till the plan was completed, no building could be begun. We learn from Mr. Pfeiffer that the building-plan, which was quickly prepared at the request of the Association, compelled the Association to have streets wider than—on account of their great cost,—it then wished to have, and that since the building of the houses, these wide streets have been found to add much to the attractiveness of the colony which is called Ostheim. Some of the streets are $16\frac{1}{2}$ yards wide, some 22 yards, and others $30\frac{1}{2}$ yards. The building-plan makes it necessary to plant two of them with a double row of trees.

ADVANTAGES AND DISADVANTAGES OF ONE-FAMILY HOUSES.

Mr. Pfeiffer discusses in a very full and instructive way the questions: How can money be most cheaply obtained? What shall be the height and size of the houses? How shall plans be obtained? Shall the houses be for one family each, or shall one house contain several families? For what class or classes of persons shall the houses be reserved?

Owing to the greater cost of dwellings in one-family houses, the Association decided that their houses at Ostheim should be built to receive two or three families each. One one-family house was, however, built, and that is the only one in the colony which does not pay. The Association resolved that it would not build exclusively for members of the working class but would build cheap family-dwellings, and let all families with small incomes have the advantage of them. Of 537 tenants 384 are workmen, 36 are single women of the working-class, 35 are under-officials of the State and Town, 50 are officials, clerks, doctors, clergymen and writers, and 32 are merchants, owners

of restaurants and other businesses. There can be no doubt that life is made more wholesome for all the tenants by this intermixture of classes.

The agreement prepared for the sale of houses to the tenants, which gives the Association the right of pre-emption, is so well adapted to its purpose that the Municipal Government of Ulm resolved to use the same form.

Mr. Pfeiffer carefully describes the procedure adopted for the purpose of ensuring that the whole property shall be kept in good order and that the Directors of the Association shall be well-informed respecting its condition, and gives all other information which can be of service to other persons who wish to begin elsewhere work like that of the Association. It would be difficult to find a more useful book.

MAGDEBURG.

Magdeburg in the year 1900 had a population of 229,667. Its Oberbuergermeister has a salary of £1,050. He was elected in 1895 for 12 years. It has also a Buergermeister, who was elected in 1895 for 12 years, and who has a salary of £675. In 1900 it had 20 public gardens, containing 630 acres, and 89 tree-planted streets, the length of which is 34 miles. The following account of the manner in which it has recently dealt with the housing of its working classes is translated from the *Zeitschrift fuer Wohnungswesen* of July 10th, 1903.

The town of Magdeburg, for some years past, has given help to building societies and professional builders who have undertaken to erect houses for workpeople, that is, small dwellings containing at most sitting-room, bedroom, kitchen and offices. At the request of the Town Council, the Insurance Institute of Sachsen-Anhalt has provided funds on the following conditions: interest at 3 per cent., sinking-fund $\frac{1}{2}$ per cent., the money to be used only for the erection of houses for workpeople, containing not more than three or four rooms including the kitchen; the rent not to exceed 4s. 4d. a week for three rooms, and 5s. 9d. a week for 4 rooms. The Town Council has resolved to charge interest at the rate of $3\frac{1}{4}$ per cent. and to use the

difference between that rate and the rate which it pays for the purpose of forming a fund to cover possible losses. The highest limit for a loan is fixed at 70 per cent. of the value, regard being had to the value of the site. Subject to strict observance of the conditions on which loans are made, the money is not reclaimable in less than 20 years. As it was hardly to be expected that the money which the Insurance Institute would lend would suffice to provide enough houses, the co-operation of the Town Savings-bank was asked for, so that loans up to 50 per cent. of the estimated value might be made from its funds, whilst loans of 20 per cent., of the estimated value might be added from the funds provided by the Insurance Institute. In this way Magdeburg has succeeded in the last three years in obtaining so much support for private builders and societies that it is now not at all necessary for the Town Council to build small dwellings, as other Town Councils have had to do. Active Savings and Building Societies are now engaged in building dwellings at their own cost on suitable sites in the suburbs, which will very satisfactorily supply dwellings to meet the needs of workpeople, including those of the better paid class; and further work of the same kind is being arranged for.

The adoption of this method of meeting the demand for workmen's dwellings by erecting houses on suitable sites in the suburbs has been made possible by the action of the Town Council, who, in 1896, prepared an admirable plan for the enlargement of the town, and at the same time revised their building regulations to ensure that the system of "building districts," to which reference has already been made, should be introduced. The plan provided an abundant supply of suitable land for the extension of the town; and the regulations ensure that the new districts shall be amply supplied with open space and fresh air, and shall, as far as possible, make good the deficiencies of the old part of the town in respect of those necessities of healthy life. Both Building-Plan and Building-Regulations of the Town well deserve careful study. They are published in a small volume by the Creutz'sche Verlagsbuchhandlung, Magdeburg, under the title "*Saemmtliche Baupolizei-Verordnungen fuer den Gemeindebezirk Magdeburg.*"

FRANKFURT AM MAIN.

Frankfurt am Main used to be a commercial town, but since the War of 1870 it has become in part a manufacturing town. Its population has increased very rapidly, and especially its working class. From 1892 to 1899 the population, as a whole, increased by 13 per cent., and the number of its artisan inhabitants by more than 76 per cent. The manner in which the Town Council have dealt with the great difficulty respecting housing, caused by this rapid and great increase of population, can hardly fail to be very interesting to those persons in Manchester who are giving attention to the housing question.

In the year 1900 Frankfurt had a population of 288,989. Its Oberbuergermeister, Herr Adickes, was appointed for his first term of 12 years in 1891, and receives a salary of £1,300. Its Buergermeister was appointed for his first term of 12 years in 1899; his salary is £750.

It has 10,446 acres of land, and 57 tree-planted streets, the length of which is 20 miles.

Under the guidance of Herr Adickes, the Town Council of Frankfurt has taken a leading part among the Councils of the large German towns in seeking to deal effectually with the housing difficulty. The following account of its action, and of the motives to which that action is due, is taken from an address delivered on September 6th, 1902, by Dr. Heinrich Roessler, Vice-President of the Town Council of Frankfurt am Main. The address, of which we can only translate parts, is published by the Verein Reichs-Wohnungsgesetz, Frankfurt am Main, Broennerstrasse 14, under the title "*Der Kampf gegen die Wohnungsnot.*"

"Even here in Frankfurt we can clearly see how far we are from a complete solution of the question, although we have indeed begun to use simultaneously all possible means, and how difficult it is even to prevent things from getting worse. And, further, we can clearly see here how very much more difficult it must be for other towns to make any progress without the aid of the State,—for towns, that is, where the conditions are not so favourable as they are in Frankfurt, where there is less wealth,

and where the local authorities are not yet thoroughly convinced that a remedy must be found. In most other places the help of the State, compulsion by the Empire and the State cannot be dispensed with.

LAND-POLICY.

Let us begin with the first of our chief tasks, land-policy. We will not consider here the much disputed question whether it is speculation which makes land, and, consequently, houses dear, as some authorities believe, or whether, as other authorities maintain, it is not rather that the dearness of land is caused by high rents of buildings, which make land yield more profit. It seems to me that both sides are right; speculation in land raises rents and high rents in their turn raise the price of land. But the ultimate cause of the evil is the lack of sites ready for being built on, and the lack of dwellings ready to be lived in. If there is a small supply of a thing, the thing continues to be dear.

If we try in all possible ways to increase the supply of land ready to receive buildings, we shall do most to counteract the rise of prices. This is just where a deficiency exists, most of all in the immediate neighbourhood of large towns. Of this Frankfurt gives us a striking example. Almost all the available land is either the property of Institutions and of a few large landowners, or it consists of an endless number of separate very small plots. Help has therefore to be sought in two directions. On the one hand, the Institutions had to be induced to allow their land to be used for building on, by having the duty of working for the good of the community brought home to them; and, on the other hand, small owners had to be caused to throw their separate plots of land together. The accomplishment of the first-named task has been in part effected by agreement, and in part prepared for. For dealing with the second task legislation was necessary. It was a long time before all difficulties were surmounted and the object was attained, and meanwhile the evil had become much greater.

As you know, as long ago as the year 1892 a Bill was introduced into the Prussian Upper House by our Oberbuerger-

meister for the compulsory consolidation and redistribution of separate plots of land, and for the expropriation of tracts of land,—a Bill which at that time was intended to apply to the whole of Prussia,—and unfortunately was thrown out in the Lower House. The existing *lex Adickes*, which, introduced by the Government itself, after endless difficulties, and maimed in one not unessential point, has at last been passed, only gives power to consolidate and redistribute separate plots of land, and applies only to Frankfurt, though it is quite certain to be extended later to other towns. You see, therefore, in connection with even our first subject, the obtaining of land, that recourse must be had to legislation.

So far as the general land question is concerned, even those who are not land-reformers must admit that towns ought to have the power to expropriate land for the purpose of providing small dwellings for the poor. The wholesome housing of the whole population is more a public interest than are most other things. The *lex Adickes* is, however, only a beginning; it gives the community the right to compel people, not to sell their land, but only to redistribute it. But we must obtain further legislation to enable the land to be used for the prevention of a house-famine. Our Society proposes that towns shall be compelled to keep the land which they possess, and to add to it as they have opportunity, and to make it available for housing purposes. For some years past Frankfurt, with this object clearly in mind, has worked towards its attainment; it has bought land as opportunities occurred, and it has begun to let some of the land for dwellings on chief rent. In the last two years negotiations for four large schemes for selling land on chief, for, in all, about 1,000 dwellings, have been brought to a conclusion, and the projects are already partly carried out. Two of them deal with land belonging to the town, and two with land belonging to public institutions. Dr. Stein is quite right in saying that the sale of land on chief rent does not in itself make houses cheaper; here again we find that one measure of reform is useless, unless other measures are applied at the same time. But sale on chief rent at least makes it possible to get land which otherwise could not be got; lessens the cost for

those who build, and secures the increased value of the land for the community; and at the same time it secures for the community influence respecting the wholesomeness and the cost of dwellings. It is certainly to be wished that the system of chief rent shall be applied everywhere in Germany as it is in Frankfurt, and shall contribute to the improvement of housing. It is most gratifying that the Imperial Government desires to move in this direction. When Graf Posadowsky, in February, 1892, proposed in the Reichstag, on behalf of the Government, that in that year £200,000, instead of, as in the previous year, £100,000, should be granted from the Imperial Treasury for dwellings for workpeople employed by the Empire, he said:—"I hold that it is the right principle to secure land for the solution of the housing question, so that the advantages of increased value may reach, not the individual, but the whole community, and that in this way means may be gained for fulfilling the task with increasing completeness." The £200,000 is to be used, not only for lending money on mortgage to building societies, but also for the purchase of land to be made over on chief rent to builders.

Frankfurt has used all other possible means to obtain land ready for building on, and to prevent a rise in the price of land. It has repeatedly incorporated adjoining townships; it has created an excellent tramway system, which it will carry out to the suburbs and further develop. Lastly, by improved building-laws, good building-lines, and the introduction of the system of rating land and buildings on the selling value, it has sought to check unwholesome speculation; and it will in the near future introduce a rate on unearned increment of value.

HELP FOR BUILDING SOCIETIES.

We come now to the second of the chief parts of our subject, which is closely connected with that which we have just been discussing, the organisation of building-loans. If the population of Frankfurt increases yearly by about 8,000 souls, about 1,600 new dwellings, and an expenditure on them of about £300,000, are needed every year. Moreover, the arrears of past

years have to be made good, for hitherto the building of houses has quite failed to keep pace with the increase of population. It is assumed that, if a rise in rents is not to be caused, at least 4 per cent. of the total number of houses must always be unoccupied. According to the report of the Frankfurt Magistracy,* 6 per cent. of our houses were empty in 1898, and this proportion has been reduced gradually till it has fallen to not quite 1 per cent., while at the same time rents have risen. And the last report of the Magistracy shows that more than 3,000 families have no dwellings of their own, but are compelled to live with others, so that the amount of building needed to-day is:—

to increase the supply of empty dwellings (about 3 per cent.)	1,800 dwellings.
to get rid of overcrowding (half of 3,000) ...	1,500 „
to replace unwholesome dwellings which should be closed	400 „
	<hr/> 3,700 dwellings.

which would cost £700,000. Only when this vast need was supplied, and this enormous sum spent, would normal conditions be established, and a cheapening of dwellings be made possible; and from that moment the yearly need of 1,600 dwellings would have to be continuously supplied. In Hamburg, for instance, in the year 1880 there was a deficiency of 3,000 dwellings, and in 1890 of 25,000 dwellings; and the Hamburg Inspector of Factories has lately said that the great industrial prosperity of that town was of no use to workpeople, as increase of rent swallowed up increase of earnings.

But let us return to Frankfurt and see what has been done of late years by the use of the credit of the town to supply the need for dwellings. On the 23rd April, 1900, our Oberbuergermeister first expressed the thought that, if towns are to obtain large results by the use of the system of chief rent, they must at the same time lend builders money on second mortgage; and a little later, in May, 1901, the Town Council accepted a proposal that a sum, fixed at first at £25,000, but soon after at

* The Executive part of the Municipal Government.

£50,000, should be used for that purpose; and the Town Council have asked that a Building and Loan Department shall be created to deal permanently with the subject. A first mortgage for 50 per cent. of the building-cost is, as a rule, easy to obtain, and if the town at the same time as it gives the land on chief rent, lends a further 40 per cent. on second mortgage, the builder has only to find 10 per cent. of the net cost of building. On these terms an agreement was soon made with the society "Volksbau und Sparverein," whose 30 dwellings are now completed in Rohrbachstrasse, then a larger agreement with the Joint-Stock Company for Small Dwellings;* and lately several

* This Company, die Aktienbaugesellschaft fuer kleine Wohnungen, which up to January 1st, 1903, had built 131 houses containing 832 dwellings and about 4,200 persons, is doing most exemplary work. In choosing its tenants it has always given a preference to families living in narrow streets, and it reserves half the dwellings in each of its houses for families which have many children, and which, therefore, but for its help, would have great difficulty in obtaining wholesome dwellings. It seeks to provide dwellings which free workpeople, receiving only ordinary wages, from the necessity of spending too large a proportion of their earnings on rent. The average rent paid by 162 of its new tenants is 5s. 3d. a week. In the dwellings which they had previously occupied, and which were structurally inferior to their new homes, they paid 6s. 9d. weekly. The rents of many of the Company's other dwellings are 3s. 6d. and 4s. a week. The Company provides for its tenants much more than well-built, well-arranged, wholesome rooms. Such rooms it regards as only *the beginning of a wholesome dwelling*, and this beginning it seeks to *complete*. How this can be done, is explained in a valuable paper by one of the Directors of the Company, Stadtrat Dr. Karl Flesch, which forms part of the thirteenth annual report. All tenants have the use in turn of bath-rooms and laundries in the basements. The tenants of each of the larger houses choose a representative, and the representatives take part with the managers in settling disputes among the tenants. Coals and potatoes are bought at wholesale prices for the tenants. The services of housekeepers can be obtained for sixpence a day by any tenant who pays regularly twopence-halfpenny a month towards their salary. The dwellings are supplied with small libraries, and much encouragement is given to the cultivation of flowers in the small gardens provided in the courts. In the courts also there are playgrounds for children. For some of the youngest children there is a crèche; for others of the older children "play-schools" are being prepared, and, for others, rooms where they can rest and read. Dr. Flesch believes that it is the duty of building companies to set a good example—within their narrow limits, and using small means, to make experiments, on the results of which, when the public conscience is awakened, the public authorities, wealthy corporations, town councils and the State may base the larger work which their greater means will make possible for them.

private persons have provided themselves with homes on this system. But for it they could not have obtained houses of their own. The Jointstock Company for Small Dwellings had previously been helped by the town, not only by having the usual building regulations somewhat relaxed in its favour, but also by the Town's taking shares in the company for £10,000. When the last-named buildings of the Company in Stolzestrasse are completed, this company will have provided dwellings for 5,000 persons. The buildings in question are the first property, built on land held on chief rent, on which the National Insurance Institution has lent money.

Two other building societies, which are now working with help from the town for the lessening of the house famine, are purely commercial companies. In the case of the undertaking known as the Heelerhof Scheme, the Company has a capital of £45,000, and has issued obligations for £170,000. It has built on land of its own 75 houses, containing 762 small dwellings. The town has taken shares for £5,000, and guarantees the capital of the obligations and interest at 4 per cent. It uses the profits which accrue to it for the gradual purchase of all the other shares, so that eventually all the houses will belong to it. Meanwhile it regulates the rents, and all the building plans have to be approved by it. The Company which has charge of the other great undertaking, the so-called Frankenallee Scheme, has obtained its land on chief rent from the Orphanage. The Company has a share capital of £26,000, and has issued obligations for £105,000. The Town in this case also guarantees 4 per cent. interest on the obligations. The Company has built 76 houses, containing 544 dwellings. There is a sinking fund, from which both shares and obligations will be paid off, and, when the term for which the lease has been granted on chief rent expires, the houses will become the property of the Orphanage. The building plans and the rents are under the control of the Town Council.

It will be in place to mention here a peculiar institution which certainly deserves to be imitated in other towns. It is a small purchasing society, called the Dwellings Society, which has a capital of £1,500, and makes it its duty to attend to

the letting and keeping in good order of small dwellings, for the purpose of making the possession of such dwellings more attractive to capitalists.

If we put together all that Frankfurt has done by the use of its credit to help to provide dwellings, we find that it has not confined itself to the use of a single method of action, but has used a whole series of means. First of all, a fact which has not yet been mentioned, the town has built a considerable number of dwellings, about 250, for its own servants, at a cost of more than £50,000. Then it has helped societies of public utility by taking shares in them, and, at the same time, it has provided such societies, building companies and private persons with land on chief rent and with funds for building; and, lastly, it has made large industrial operations possible by guaranteeing obligations, and, by its control, has stamped them as undertakings of public utility. Partly by direct action, partly by giving guarantees, the town has provided nearly £400,000 in the last two years, and it, and the societies supported by it, have built more than 3,000 small dwellings. Those are certainly satisfactory figures. And in fact this is the first year in which the scarcity of dwellings has not increased, and the beginning of improvement inspires confidence. But a complete cure has not yet been attained, and rents have not yet been sufficiently reduced. It is with dwellings as with sites. So long as there is not an adequate supply, all exertions are of no avail.

Let us now look away from Frankfurt conditions, which certainly have given many important suggestions for the management of building-credit on a large scale, and let us see what State and Empire have done so far respecting housing, and what they ought to do in the future. First of all, we must repeat that it is the getting, not of the first mortgage, but of a second which is difficult, and that the State and the Empire must give help respecting second mortgages to the building operations of societies of public utility, if those operations are to be much increased. We find a promising beginning in the use made of the £200,000 granted by the Empire for the support of building societies formed by the workmen and officials in its employ. For it was expressly stipulated that, only when

first credit for 60 per cent. had been obtained from other sources, 25 per cent. on second credit should be given; so that, apart from the question of land, the £200,000 made it possible to expend £800,000 on the building of small dwellings.

PROMOTION OF BUILDING BY THE STATE.

Before we consider what further steps ought to be taken by State and Empire respecting the building-credit question, we must speak of the help given by the Institutions* for Insurance against Infirmary. To the end of the year 1901, of the £30,000,000 capital of these Institutions about £4,050,000, or about 14 per cent., was lent for the building of small dwellings. The Institutions of Rhenish Prussia, Hanover, and Hessen-Nassau have taken the first and largest place in this work, lending respectively £800,000, £600,000 and £300,000. In this last year our Hessen-Nassau Institution lent £100,000, and in the coming year it will be able to lend nearly £150,000. Gradually the Insurance Institutions of the other Provinces will see the importance of extending their social duties in this direction; and, before many years are over, the greater part of their funds will be made of use in the solution of the housing question. At one time the Infirmary Institutions were allowed to invest only a quarter of their funds, or under certain conditions half, in buildings. Through the new interpretation of paragraph 164 of the law of July 13, 1899, they can now so invest all their funds.

Trade societies and many other public bodies have begun to invest part of their funds, and some savings banks at least a part of their reserve funds, in small dwellings. Savings banks especially might do far more. They might safely do more for societies of public utility, in respect both of rate of interest and of the amount lent, than for private persons, because they are in a position to see and examine their balance-sheets. Whether or not we recommend that the control of the lending of money for building purposes, and, with that the general control of the whole housing question, shall be made over to the Insurance

* For an account of these Insurance Institutions see pp. 174—182.

Institutions, or whether or not we deem that special new organisations—Provincial Committees working under an Imperial Dwellings Department—are necessary, it is certain that we cannot do without the co-operation of the Empire for the regulation of the system of credit for building. The example of Belgium shows what centralised action can do in this matter. There the £25,000,000 invested in the State savings banks have been utilised, and in seven years, by giving support to 113 buildings societies, more than 9,000 houses have been built.

So far the Prussian State has confined its help in the matter of dwellings to providing houses for the workmen and officials employed in the businesses controlled by the State, especially those employed on the State railways. For dwellings for these persons the State has granted £1,600,000 since 1895—£600,000 in the one year 1902. The measures which we have hitherto considered, the obtaining of land for building purposes and the regulation of credit for building operations, are intended to prevent a dwellings-famine by increasing the number of workmen's houses and by reducing rents. The measures which we have now to discuss—building regulations, town-extension plans, and the systematic inspection of dwellings—must be looked at chiefly from a hygienic point of view, although the two subjects cannot be completely separated. We have to find means for enabling our people to obtain, not only the cheapest possible dwellings, but also wholesome dwellings.

BUILDING REGULATIONS.

If we start again with what Frankfurt has done in this matter, we must notice that almost all that has been accomplished belongs to the last ten years, as, till then, the authorities had somewhat neglected the subject. The old building regulations in Frankfurt, which made no distinction between the Inner Town and the Outer Town, between residential and manufacturing districts, allowed everywhere four upper storeys, and only required that a quarter of each site should be left uncovered. In the year 1891 new building regulations were introduced, which treated the Inner Town and the Outer Town

differently, and in the latter, to which of course the regulations chiefly applied, they distinguish residential, manufacturing and mixed districts. In the Outer Town only three upper storeys are allowed, and only half of each site may be covered. And in the most recent building regulations, those of the year 1897, only two upper storeys, as a rule, are allowed in the Outer Town, and the uncovered part of each site has generally to be considerably more than half. Whilst, according to the oldest building regulations, not more than 29 square yards of land could be required for each dwelling, this minimum was raised in the year 1891 for the Outer Town to 146 square yards in the residential districts, and to 98 square yards in the mixed districts, and in the year 1897 to 179 and 119 square yards respectively for those two districts.

From the point of view of builders these, and many other regulations, have seemed to be severe; but they are necessary for the purpose of causing buildings to satisfy all the conditions needed for health. It must be admitted that the lowering of the price of land, which was expected and desired, has not yet taken place. The reason is that there has been a deficient supply of land available for building purposes, and the restrictions imposed, respecting the degree to which land may be utilised, have made it still scarcer for the moment. We see again that a single measure often not only does not help, but for a time may even do harm.

Building regulations, as a rule, exist for the attainment of three objects—(1) safety from fire, (2) stability, (3) good influence on the health of the population. Here we are interested only with the third object, and, as in relation to it a sufficient supply of light and air are of the first importance, it is obvious that the course taken by Frankfurt must be followed if barrack dwellings are to be kept out of the new parts of towns, and some approach to the ideal of houses for only one or two families is to be made. The dimensions of buildings must be limited as far as possible in relation both to height and width.

There was a time when people wished that these matters should be regulated by a Government department

through the enforcement of hard and fast rules; later, when the defects of that method became evident, the general wish was that each town should deal with such matters for itself by its own by-laws; and, lastly, to-day we desire that the Central Government shall exercise general control of such matters by legislation. But it must be well understood that the Central Government must only lay down the general lines of action and must leave power for details to be dealt with in accordance with local needs by local by-laws.

BUILDING PLAN.

In the preparation of plans for the extension of a town, which ought always to provide in advance for the needs of a considerable number of years, attention must be given to ensure that the new districts shall be beautiful, shall be convenient for traffic, and, especially, shall be healthy. Within the large blocks of buildings, formed by the wide streets needed for traffic, narrower streets lined with dwellings must run, and in these narrower streets open building must be encouraged in all possible ways. Progress in this direction has been made in a considerable number of Prussian towns, and much has been done in other States, especially in Saxony, but, on the other hand, in other places things are in a very bad condition, and there are no general rules which must be complied with. In all these matters the action of the separate Governments must not be undervalued. We know it to be very useful, and we are waiting eagerly for the law on dwellings promised by the Prussian Government. But, nevertheless, we are convinced that the co-operation of the Empire respecting building laws and town extension plans cannot be dispensed with, for the establishing of normal regulations, so that reform may also be effected in those States which are now most backward. In any case, all existing codes of buildings laws and town-extension plans ought to be revised as soon as possible.

The eminent Government Surveyor of Buildings, Herr Stuebben, asks for legislation by the Empire respecting the following points:—

1. The town extension plan must provide for the needs of several decades, and must indicate the minimum that will be allowed in the arrangements for the supply of light and air.

2. The building regulations must prescribe that there shall be differences in the degrees in which the ground may be covered with building in different districts, and must impose certain restrictions on the height and width of buildings. It must contain fundamental regulations respecting the height of rooms and respecting staircases, privies, cellar-dwellings, etc.

3. The building regulations ought to allow of differences in modes of constructing different kinds and different sizes of buildings, so as to promote the construction of small houses.

INSPECTION OF DWELLINGS.

While building regulations and town extension plans must ensure that new dwellings shall comply with the conditions which are necessary for healthy life, inspection of dwellings must ensure that all that is dangerous to health in existing dwellings shall be removed, and that thoroughly bad dwellings, which cannot be made wholesome, shall be closed by the authorities, so that healthy life may be possible in old parts of towns and in old houses. It must be noted in this connection that, as has already been mentioned, there must be a sufficient supply of new dwellings, if any good is to be effected by closing unwholesome ones. We have learnt that by experience in Frankfurt, where the introduction of the system of inspection of dwellings has had to be delayed for many years, just because there were no new small dwellings in existence; so that, if unwholesome dwellings had been closed, the house-famine would have been increased, and people would have been turned into the streets. Through private investigations it had been known for some time that very bad conditions existed in some parts of the town. But when, in 1898, the report of the enquiry instituted by the Tenants' Union, which has become so widely known, was published, the Town Council saw clearly for the first time what serious evils in respect of overcrowding and injury to health by unwholesome dwellings existed here, and a demand for reform rose on all sides. Unfortunately in the next few

years the elected members of the Town Council did not give adequate support to the permanent members, the supply of small dwellings continued to dwindle, rents continued to advance, and it was impossible to close unwholesome dwellings.

A better state of things now exists. Through the enquiry which has been referred to, through the further action of the Tenants' Union, which at municipal elections submitted certain questions to candidates and supported only those who undertook to promote housing reform, and through other circumstances, the elected part of the Town Council has improved in this respect. With its assistance a sufficient supply of small dwellings for the near future has been secured, and the Executive of the Town Council intends to start at once its system of inspection, which has been ready for several years, and has received the approval of the police authorities. In January, 1902, the newly-formed Health Committee entrusted a sub-committee with the necessary preliminary work. The committee has in its service four medical men and four building officials. It has divided the town into districts (for the present there are four such districts, in each of which a doctor and a building official work together) and has begun a systematic house-to-house examination. It at once requests the owners of unwholesome houses to effect improvements, and, in case of continued refusal, applies to the police. The existence of the Medical Officer of Health of the District, which used to be cavilled at, is now found to be of value.

As regards the general introduction of systematic inspection of dwellings, Herr von der Goltz, who introduced and superintended inspection in Strassburg, has come to the conclusion that the help of legislation by the Empire is indispensably necessary. At present there is no legal power to compel towns to introduce and maintain systematic inspection, and everything in relation to the matter is left to the decision of the different local authorities. In many places nothing is done. "Everywhere," says Herr von der Goltz, "the same miserable state of things. A considerable proportion of our poorest people live in dwellings which cause serious injury to health and make real family life impossible."

DUTY OF THE EMPIRE RESPECTING HOUSING.

An Imperial Dwellings Department must be created, whose duty it shall be to superintend the introduction and working of all systems of inspection of dwellings. The inspection must, at least in all large towns, be compulsory. If possible, it must be undertaken, not by the police, but by committees, on which some citizens serve as honorary members; and these committees must from time to time examine all dwellings, and ascertain whether they comply with the regulations in respect of the relation of air-space to number of occupants, of supply of water and privies, of sub-letting, etc. The committees must be entrusted with the necessary legal powers to have improvements made without delay, and, when necessary, to close dwellings. In places where inspection has gone on for a considerable time, as, for instance in Strassburg, its good effects are admitted by everyone. Housing conditions have more and more improved, although compulsion has seldom had to be used. The making known of serious evils has often contributed to improvement.

In conclusion I will briefly recapitulate. The task which we set before us, the creation for the German People of the possibility of obtaining wholesome and cheap dwellings, is vast, and for the fulfilment of the task strong measures are necessary.

It must not be left to the good-will of the various towns and other communities to decide whether, and how far, they will help. The State, and, in the last resort, the Empire, must take part in the work with their powers of compulsion, their credit and their legislation. We have come to the same conclusion in dealing with each part of our present programme. What we demand is:—

1. The towns must be made to adopt a sound and far-seeing land-policy; and, for the redistribution of separate plots of land and for the acquisition of land, which are necessary in the interest of the housing question, the possibility of using compulsion must be given them by legislation.

2. The granting of loans on the security of land and buildings must be organised by law, and, where the credit of a town does not suffice, the credit of the State must supplement it,

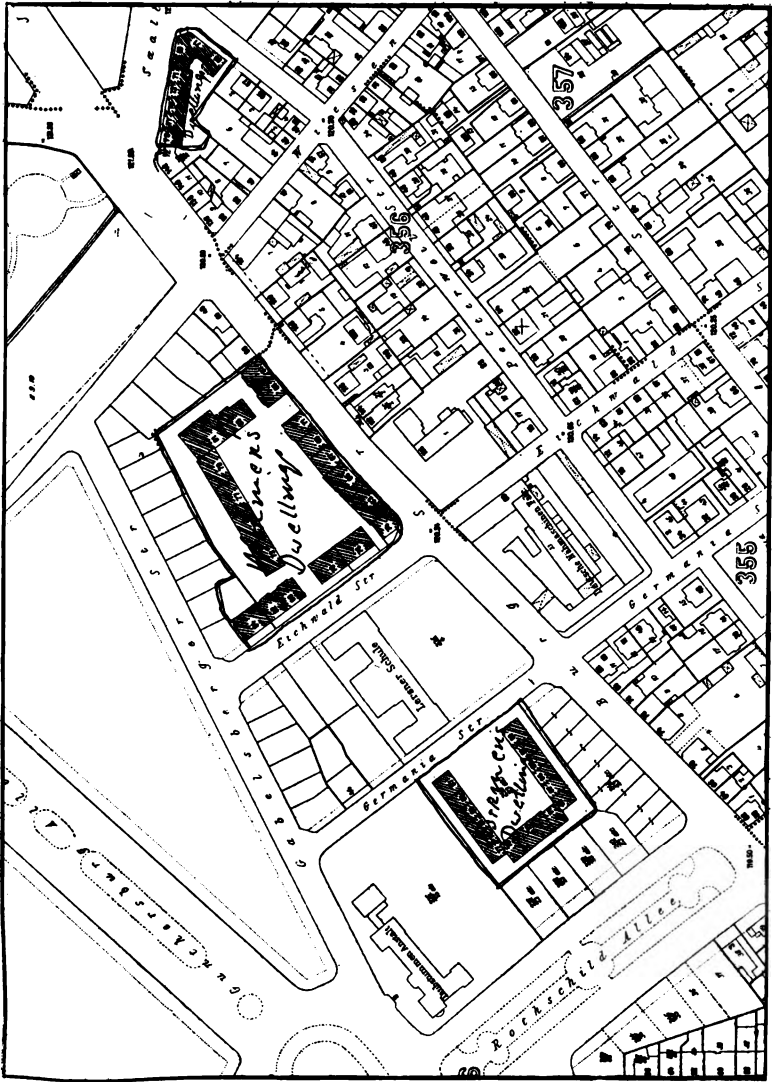


FIG. 1.

To face p. 137.

whether this be done in connection with the National Insurance Institutions or in connection with authorities to be created for the purpose.

Building regulations and town-extension plans must satisfy certain conditions to be fixed by law, and they must be revised by the State.

4. The towns must be compelled to have dwellings systematically inspected, and must, through the inspections, establish conditions for which a standard must be fixed by law.

We most gladly welcome all that has been accomplished in relation to all these four points by the various German States, but we believe that the co-operation of the Empire cannot be dispensed with, if we are to give help quickly, energetically and everywhere in the German Empire. Before all things, it is necessary that the much longed-for Imperial Commission shall at last be appointed to prepare a general programme of reform, and to give to Town, to State and to Empire its due share of the task."

ENVIRONMENT OF WORKMEN'S DWELLINGS.

The accompanying copy of part of the official plan of Frankfurt shows the position of three of the new blocks of workmen's dwellings in the new north-eastern portion of the town. It will be seen that the great width of the principal streets, and the proximity of the broad tree-planted Rothschild Allee and Guenthersburg Allee, with the shrubbery at their intersection, make it easy for the tenants of the workmen's houses, who in this respect are not better situated than are the occupants of the other new dwellings, to reach in a few minutes places where they can enjoy abundant light and fresh air, and either exercise or rest. Their dwellings, therefore, are incomparably superior, in respect of pleasantness and wholesomeness of environment, to any new dwellings which exist in Manchester or any other large English town. The width of Burg Strasse is a little over 18 yards, and that of the Guenthersburg Allee is 80 yards.

The task of the Town Council in improving its housing system and in laying out the new parts of the town with streets

of adequate width, and with an adequate supply of open spaces, has been much facilitated by the town's possession of land. It owns $16\frac{1}{3}$ square miles of land, while Manchester, with nearly twice as large a population as that of Frankfurt, has in its parks, including Heaton Park, only a little more than $1\frac{1}{2}$ square miles.

COELN.

Coeln in the year 1900 had 372,552 inhabitants. Its Oberbuergermeister was appointed in 1886 for his first term of office, 12 years, and for a second term of 12 years in 1898. He receives an annual salary of £1,250. There are 11 Adjoints, of whom all but one receive salaries. The first Adjoint, who has been in office since 1887, and who is appointed for periods of 12 years at a time, receives a salary of £600. The Town Council consists of 45 unpaid members, who are elected for periods of six years. Every second year a third of the members retire. Half the members must be house-owners. In the year 1900 41 of the 45 members were house-owners. In 1900 Coeln owned 1,450 acres of land, and institutions, controlled by the Corporation, owned 8,430 acres. It has 285 tree-planted streets, the length of which is $64\frac{1}{2}$ miles, and 82 public gardens, containing 564 acres.

The older part of Coeln has very narrow streets, and the town used to be very badly drained and unwholesome. For many years past it has been managed by the municipal authorities with great intelligence, and the new parts contain well-arranged wide streets, many of them planted with trees, and many pleasant shrubberies and other open spaces. We refer to this town here because a clearly-written and well-illustrated Report on the Condition and the Management of the Communal Affairs of the Town of Coeln in the Financial Years 1891 to 1900, published in 1902,* enables us to give an account of a typical example of the town-extension plan, to the preparation of which every intelligently managed town in Germany gives great attention,

* Bericht ueber den Stand und die Verwaltung der Gemeindeangelegenheiten der Stadt Coeln in den Etatsjahren 1891 bis 1900. Coeln, 1902.

and the lack of which in this country suffices to form an insuperable obstacle to all attempts to deal adequately with the housing question.

MUNICIPAL SOCIALISM.

Respecting the action taken by the municipal authorities of Coeln in relation to "municipal trading" and the housing question, the Report says:

The opinion of timid minds, which at one time was so often heard, that large undertakings ought not to be managed by the town itself, as its organisation is too bureaucratic to allow it to be a successful manager, is no longer heard. There is now an imperious demand that those undertakings, which supply the needs of the whole community, shall be managed by the municipal authorities, as they know better how to protect the general interest than traders, whose first care is to make profit, even if no regard be paid to the fact that such undertakings generally leave a not inconsiderable surplus, and can contribute materially towards the lightening of the burden of municipal expenditure. Under the influence of these views, in the last ten years the gasworks here, which were private property, were bought, the whole of the street tramway system taken over at great cost, and almost half of the shares in the railway from Coeln to Bonn acquired. Thus the town of Coeln, which now owns the gas-works, the electricity-works, the water-works, the tramway system, the harbour and wharves, the slaughter-houses and cattle-yards, etc., has become the largest trader in the place.

To trade and commerce, which have been unusually prosperous in the last ten years, great sacrifices have had to be made. New harbour and wharf works, satisfying modern requirements, have been constructed, a new slaughter-house and cattle-yard, which can be enlarged, have been built outside the town walls, and the building of a principal market-hall has been decided on. By the opening of new streets and by street-widening traffic has been improved. The completion of a system of sewers for Old Coeln, and the extension of the system to the suburbs, the distribution of the water supply over the whole area of the town, careful cleansing of the streets, the development of the

sanitary police, and, not last, the numerous well-cared-for public gardens and parks, have done much to improve the public health. Among the public parks the beautiful Town-Wood deserves to be mentioned first. Its splendid development in the short time of its existence has reconciled those who at one time opposed its formation.

Great improvement was effected in the appearance of the town by these works, by the construction of new wide streets, some of which are planted with trees, and by the erection of numerous public monumental buildings and statues. The "Ring" Street, which is more and more becoming the principal artery for traffic, has received a worthy completion, both on the north and south sides of the town, by the addition of the two ornamental grounds, the Ubier Ring and the Deutsche Ring, each of which is almost 130 yards wide. The new wide Uferstrasse, which runs through the whole width of the town by the side of the Rhine, has given the old Hansa-town, when seen from the river, a much pleasanter aspect, and there is now there one of the most beautiful town-views to be found anywhere on the Rhine.

HELP TO BUILDING SOCIETIES.

In the domain of social activities there is much progress to record. It was right and natural that the municipal authorities of Coeln at first confined themselves, in relation to the new social ideas, to giving active assistance to the numerous social unions and societies which were formed here, without seeking to make themselves the leaders in such matters. Thus the Labour Bureau, the Society for Insurance against Loss of Work, and other societies, received annually a considerable amount of financial help. To building societies, not only is a reduction of the land-rate granted, but, too, half the cost of street-making, amounting in the one year 1900 to £12,500, is remitted.

NEW FORMS OF WORK.

But social ideas make constant progress; and the more the town extended its activities, the sooner it was compelled to take a

part in the task of solving the problems in which it had the largest concern. It now began to build dwellings, or to alter existing dwellings, for the workmen and under-officials employed in nearly all the municipal departments—the gas-works, the water-works, the electricity-works, the harbour, the slaughter-house, the cattle-yard. Baths were erected, regulations for allowances to the widows and orphans of workmen and officials employed by the town were prepared, and annual allowances granted to the municipal workmen and officials in cases of lasting disablement for work—allowances exceeding in amount the limits of the relief granted by the Imperial system of insurance against accident and infirmity. Thus social legislation received through the municipality, especially by means of the system of assistance to widows and orphans, the completion which unfortunately Imperial legislation has so far not been able to give it.

SCHOOLS.

Starting from the conviction that sound training best fits a man for success in the struggle for existence, large expenditure on the school system was not shunned. A Classical School was added to the Realgymnasium and a new Progymnasium was founded in Coeln-Ehrenfeld. Regard was shown to the character of Coeln as a commercial town by the foundation of a School of Commerce and of several Intermediate Schools. The primary schools received an addition of 17 new schools. By the placing of shower-baths in the schools, the appointment of school-doctors, and the formation of holiday-colonies, care has been taken for the improvement of the health and strength of school-children, especially those of the poorer class. The establishment of courses of hand-work has made it possible to continue the education of young people and keep them under supervision in out-of-school time. The industrial technical schools, which have attained to new life, have had as their object the continuation of the training of those who have left school; and it cannot be denied that these institutions have had an influence, which must not be under-valued, on the brilliant development which has taken place in the artistic hand-work

of Coeln. Continuation schools and classes were introduced in consequence of the well-founded complaints of persons interested in handicrafts that the rising generation often lacked regular training in those crafts.

LIBRARY, MUSEUMS AND HIGH SCHOOL.

But it has not been only material interests which have had to be cared for in the last decade. Efforts towards intellectual progress have also received active help. By numerous and important gifts, received from noble-minded and art-loving citizens, it has been made possible to complete and increase the existing libraries and art collections, as well as to provide fitting accommodation for all these treasures. The Archives of the town and the library have found their long-wished-for home in a building, well adapted for its purpose, which can be enlarged to hold 300,000 volumes. The treasures of the Industrial Art Museum, which, for lack of suitable premises, had had to be distributed through the town, wherever space could be found, were transferred in 1899 to the stately new building in the Hansa Ring, where, properly displayed, they are able to discharge much more fully than before their principal function of exercising a stimulating influence on the industrial art of the town. New Museums for Folklore and for Natural History have been created. Coeln now possesses five museums with important collections, of which those of the Wallraf-Richatz Museum and the Industrial Art Museum have an influence which extends far beyond the boundaries of the town. Exhibitions and public lectures have been held for the purpose of increasing interest in Art. But the erection of the High School of Commerce must be regarded as our highest achievement in the domain of Art and Science. To-day, after a hundred years have passed since the doors of the old Coeln University were closed, Coeln again possesses a High School. And, if it is only right that the public spirit and enterprise of the citizens should be the source from which great and sound enterprises spring, while the task of the Town Government ought to be, and can be, in the main, only to provide guidance for those enterprises, then a great future can safely be predicted for the High School. For it was Coeln's

great son, Gustav von Mevissen, who, with far-seeing eyes, discerning the needs of the commercial metropolis, not only made us see that the School was necessary, but also made the School possible by his important gifts and legacies. The Town Government gave practical form to his impulses, and removed the numerous hindrances which stood in the way of the undertaking. So, without help from the State, the High School of Commerce came into being, a lasting monument of truly noble civic spirit. The School is provided with an excellent staff, and is equipped with excellent apparatus, and it now rests with the citizens, by active support in all directions, to do their part to ensure that the desire of the founder shall be fulfilled, and the High School of Commerce become "a focus of scientific life and effort in the Metropolis."

TRANSIT.

Speaking of the tasks which now await the town government, the report says:—The construction of suburban lines cannot be longer deferred, if due regard is to be given to the movement of population into large towns. The connection, now lacking between the town and the outlying districts, must be supplied by numerous radial lines. Far more important than the indirect advantage, which the town will gain by the construction of such lines, is the social improvement which will result. The Old Town is more and more becoming only a business town. The clearest proof of this is that, while in the town as a whole there was in the last decade an increase of 23·8 per cent. in the number of dwellings, in the Old Town the increase was only 6·7 per cent.; and, while the number of houses occupied by their owners increased in the New Town by 50·6 per cent., and in the suburbs by 9·3 per cent., there was a decrease of 5·2 per cent. in the Old Town. Naturally this change has caused an increase of rents and of the price of land in the immediate neighbourhood of the Old Town. The object of the new lines will be to open out a wide district for building, and to provide rapid and convenient communication between that district and the Old Town where work is done. In this way it will be possible to create wholesome, small and cheap dwellings, and to prevent undue

increase of prices and unsound speculation in land. It is from these social points of view that the proposals must be considered, and, indeed, in the next ten years the tasks of the town in relation to social matters will be more comprehensive and serious than they have been hitherto.

In all these efforts, it will be necessary to attend at the same time to promoting Art and Science, and to increasing the beauty of the town, by developing the Museums, and the High School of Commerce, by erecting monumental buildings, by creating wide streets, as far as possible planted with trees, as well as public parks and gardens.

Great and important then are the tasks, of which some have now been shortly noticed, awaiting the Town Government and the Town Council in the coming decade, and great sacrifices must not be shunned to bring those tasks to fulfilment. For their purpose will be to keep and strengthen for the town the position assigned to it by history and by its geographical situation. The Town Government is convinced that the great readiness to make sacrifices which has always been shown by the citizens of Coeln and their representatives, and which has at all times found eloquent expression in splendid institutions and legacies, will not fail in the coming ten years, and that every necessary sacrifice will be willingly made to raise and to advance the consideration of the town. May we always remember that to stand still means to fall back, and that, in the life of towns as in that of persons, there is no more dangerous enemy of progress and real prosperity than too much self-satisfaction.

CONTROL OF ADVERTISEMENTS.

It deserves mention that in 1897 a new by-law was published for the regulation of advertising in the town. It gives the police power to prevent the exhibition of advertisements which have a disturbing effect or are ugly. The by-law is said to have effected its object.

INSPECTION OF BUILDINGS.

A good effect on the public health was produced by the establishment of a system of inspection of all buildings in the

town, with a view to the discovery of causes of danger to health. The inspections were made annually in the months of June to September, with the help of the District Overseer. The good result of the inspection showed itself very soon. The second inspection took place in 1895, and not nearly so many causes for complaint and interference by the police were then discovered as had been found in the preceding year. The system was superseded by the introduction in 1899 of a system of Continuous Inspection of Dwellings. The new system gives the police the power to remove all defects in dwellings. For this purpose dwellings can be classed as "unfit for occupation" on account of defective construction, insufficiency of light and air, etc., and as "overcrowded" on account of having too many occupants. In both cases the owner of a dwelling objected to cannot let it when it becomes vacant, without first obtaining the permission of the police.

The introduction of this new system was preceded by an inspection of all the dwellings to which the police regulation applies. They number about 80,000,—houses occupied by a single family each, and the dwellings of brickmakers, not being included. The inspection was made by the officials and the expert members of the Building-Police. All dwellings are entered in special lists. The superintendence is continuous. The good result of the work is unmistakable. Often when the inspecting officials have given instruction and counsel by word of mouth to the tenants, constructive defects in the dwellings are made good by the owners, and more light and air are supplied, and better arrangements are made for the separation of the sexes in bed-rooms.

BUILDING REGULATIONS AND BUILDING-PLAN.

New building regulations came into force on July 1st, 1901. They establish the so-called "Zone" or District building system, by which all the building-sites in Coeln are divided into four classes, as is shown on the accompanying plan. The First Building Class includes the districts within the line of walls on both sides of the Rhine, with the exception of the sites for which "open building," the Fourth Class, is prescribed, and with the

exception also of the main thoroughfares in the suburbs Nippes and Ehrenfeld. The parts of the town which are in this First Class are indicated on the plan by blue colouring. The Second Building Class, shown on the plan by red colouring, comprises the suburbs of more urban character, while the suburbs of more rural character belong to the Third Class. On the plan the districts included in the Third Class are left uncoloured. The parts of the plan which are coloured green indicate the districts which belong to the Fourth Class, that of the so-called "Open" or Villa mode of building. These separate building-classes are distinguished from each other in two ways, by differences in the number of storeys and in the height of building allowed in them, and by differences in the degree to which the sites may be covered by buildings.

In the First Class buildings may have four storeys and be of a height of $66\frac{1}{2}$ feet.

In the Second Class buildings may have three storeys and be of a height of $52\frac{1}{2}$ feet.

In the Third Class two storeys and a height of 38 feet are allowed.

In the Fourth Class two storeys and a height of $52\frac{1}{2}$ feet are allowed.

In the First Class 75 per cent. of each site, or 80 per cent. of a corner-site, may be built over.

In the Second Class, if the buildings do not exceed a height of 26 feet, 75 per cent. of a site may be built over; if the buildings exceed 26 feet in height, not more than 65 per cent. of the site may be built over.

In the Third Class, if the buildings do not exceed a height of 20 feet, 65 per cent. of the site may be built over. If the buildings are more than 20 feet high, not more than 50 per cent. may be built over.

In the Fourth Class 40 per cent. of a site, and 50 per cent. of a corner-site, may be built over.

In the Fourth Class each building must be at least $16\frac{1}{2}$ feet from the boundary of the adjoining sites, and at least 33 feet from the next house.

The chief advantage of the new building regulations con-

sists in this, that they take account of the peculiarities of all parts of the town, and that they fix the mode of building even for those plots of ground on which military rules do not at present allow any buildings to be erected, so that, when the prohibition is removed, it will be known at once what kind of building is allowed, and thus a disorderly use of the ground is made impossible. Further—and this is to be welcomed both from the hygienic and from the æsthetic point of view,—a large area is reserved for “open” or villa building, so that when, in the, it is to be hoped, not distant future, the circle of fortifications which at present checks the development of Coeln, is removed, there will be round that part of the town which now lies within the Walls a broad band of villas, branches from which will extend on the south to the South Park and the Villa Colony of Marienburg, on the west to the Town-Wood, and on the north to the Flora District.

CONSTRUCTION OF STREETS, ETC.

At the beginning of the period to which the report relates, the large undertaking of the extension of the town, which was started in the year 1881, was nearly completed. The work has had ever since a continuous influence on the development of Old Coeln and the suburbs.

The Old Town, now at last released from the girdle of fortifications, which had prevented all freedom of movement, imperiously demanded more air and more light. During the ten years reported on, streets have been widened by the fixing of plans for building-lines, buildings which interfered with traffic have been removed, connecting streets have been carried through blocks of buildings, open spaces have been made, and ornamental grounds created. Care has been taken for the systematic paving of the streets, numerous building plans have been made for Old Coeln and the suburbs, the sewerage of Old Coeln has been completed, and has been carried a considerable distance into the suburbs.

The new harbour and wharves have been the principal work which has been carried out in the decade. The

completion of the street along the Rhine bank, in connection with these works, gave the old metropolis a new face on its Rhineward side, and created one of the most beautiful town pictures to be found on the venerable Rhine. For the purpose of preserving this picture for the future, and of still further embellishing and completing it, it was resolved to offer prizes for designs for the completion of the fronts of the houses in Rhinebank Street. It is hoped that in this way the houses of that part of the town, which are built in the old Coeln style, with interesting decorated gables, and some of which date from the 16th to the 18th centuries, when they are destroyed will be replaced by houses of equal interest, and that the very characteristic view offered by this quarter will be extended.

Until the year 1891 the staff of the department which has charge of the construction of streets, etc., had, under the Town Architect, who is its head, three Inspectors of Buildings, one State Architect, and 50 Engineers, Draughtsmen, Architects, etc. The large works which have been mentioned had by 1900 led to an addition to this staff of 15 Engineers, Draughtsmen, etc.

Each of the three Inspectors of Buildings has had a distinct and separate department of work placed under his charge, subject to the superintendence of the Town Architect. One had charge of all the work connected with the water-supply and with the construction of the harbour; another, of the construction of streets; and the third, of all the work of sewerage and draining. They all had separate staffs of Engineers and Trained Assistants assigned to them for the carrying out of their work.

Attached to this department is the Surveying Office, the staff of which consisted in 1891 of one Town Surveyor or Chief Surveyor, seven Land Surveyors and Surveyors, and one Draughtsman. By 1901 three Draughtsmen had been added. The special work of the Surveying Office consists of effecting all the measurements and other preliminary work which are necessary for the fixing of building-lines and the preparation of building-plans, and also for the making of contracts for the construction of streets. The Chief Surveyor also takes part in the work of purchasing plots of land within the boundaries of the town.

BUILDING-LINES AND BUILDING-PLANS.

When, in the year 1888, the new districts on the left side of the Rhine were incorporated, the only building plans, *i.e.*, fully worked out building-lines, relating to considerable areas of these districts, which had been definitively adopted, were those for the two townships of Ehrenfeld and Lindenthal. For Nippes there existed only building-line plans, that is building-lines for separate streets or parts of streets, and only for streets already made; and for these streets no decision as to the level had been arrived at. During the period to which the report relates, 272 building-lines and building-plans have been decided on for the suburbs, and of these 35 relate to areas of considerable size. On the 1st April, 1901, building plans were completed for 10 districts. The accompanying plan, Fig. 5, shows the network of streets of one of the districts. By the adoption of curved roads, front gardens, and avenues, the new demand for a picturesque arrangement of streets has been complied with, and the character of a villa-colony has been preserved.

During the same period 86 building-lines or building plans—ten of them for considerable areas—have been decided on for the Old Town and eight for the New Town.

PAVEMENT OF STREETS AND ROADS.

In the course of the last few years the conviction has more and more gained ground that good pavement not only is a very pleasant possession for the inhabitants of the town, that it not only does much to facilitate traffic, but also that it is a very effective means for improving the health of the population. Good pavement promotes the rapid passage of rain water to the drains, facilitates the cleansing of the surface, lessens the formation of dust, prevents fouling of the subsoil, and increases the feeling for cleanliness among the people. From these points of view the Town Government in the last decade has endeavoured to increase the amount of pavement in proportion to the growth of the town, and it has also tried to improve the quality of the paving of the streets in the Old Town and the suburbs, as increase of technical knowledge has made

this possible. These efforts have been made chiefly for the purpose of rendering the town more healthy; but that the improvement of traffic has not been left out of sight is shown by the widening of streets, and the making of new streets in the Old Town, and by the formation of many new thoroughfares in the roomy suburbs.

The chief alteration made in street-construction in the Old Town during the last 10 years has been the application of pounded asphalt in the formation of many streets. It was the unusual degree in which the buildings of the Old Town are crowded together, the narrowness of the streets, and the necessity, due to this narrowness, of allowing pedestrians and vehicles, in many cases, to use the same part of the streets, which, in the first instance, made it necessary to use a more noiseless and more level covering for the surface than stone pavement. Berlin and Paris have made the greatest progress in the improvement of pavements. But, while Berlin has given the preference to asphalt, Paris has preferred wood. It was not possible to decide, by the results of experiments made elsewhere, which of the two kinds of pavement would be more suitable for Coeln; it was necessary to try both kinds in the town. The first wood pavement was laid down in 1886, and the first asphalt pavement in 1889. At the beginning of 1891 about 3,400 square yards of each kind had been laid in various lengths of street. The first applications of the new pavements were made, for the sake of their comparative noiselessness, in front of public buildings, schools, churches, etc. Later they were preferred for those streets which were too narrow to allow of the existence of footpaths of adequate width. There has been a steady increase in the area of asphalt pavement each year of about 6,000 square yards, whilst the area of wood pavement had only increased in 1900 to about 9,600 square yards. The reason for the difference is that wood pavement does not last long under the conditions to which it is exposed in Coeln, and costs much more than asphalt to keep in repair. Our experience agrees in this respect with that of nearly all the other large towns in Germany. The conditions in Coeln are unusually unfavourable for wood pavement, as,

owing to the narrowness of the streets in the old part of the town, little air and sunshine reach it, and it, therefore, soon rots. Wood pavement is, therefore, now only used in Coeln in places where it is desirable to have noiseless pavement and the gradients are too great to allow of the use of asphalt.

It is interesting to know that, while at first foreign contractors alone laid down our asphalt pavements, local firms began in 1893 to take an increasing share in the work, and, since 1897, have been the only ones engaged in it. It is pleasant to be able to state that this new local industry is not only able to supply our own needs, but has gained a large sphere of work outside the boundaries of our town.

BICYCLES AND TRAMWAYS.

The report speaks thus of Bicycles and Tram-lines: There are two sets of means for locomotion which have attained to increased and unexpected importance during the decade. That the use of the cycle, so far as it serves as a means for locomotion, must receive as much consideration as possible when streets are made needs no proof. But the cycle, as a means of amusement and recreation, deserves great consideration. For it is for thousands a means for strengthening body and mind by wholesome exercise in fresh air, and a means for enjoying the beauty of Nature in the more distant surroundings of Coeln. It is therefore intended, and the intention has been partly carried into effect, that there shall be separate cycle-tracks in the new streets, and especially in the chief thoroughfares in the suburbs.

Tram-lines have assumed very great importance in the life of large towns. In Coeln, as in other towns, this importance will probably be very much increased by the introduction of the system of electrical driving. It is therefore necessary, in relation to the extension of the town, to take into account beforehand that it must be made possible to have double tram-lines in the larger streets, without interference with the convenient use of the streets for other purposes. In the planning of new streets for Coeln, as a rule, a width of 8·2 feet is allowed for a single tram-line, and of 16·4 feet for a double track.

TYPES OF WIDE STREETS.

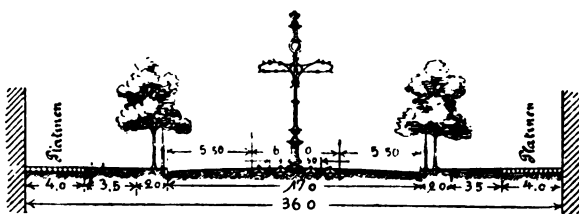
We reproduce here representations of sections of two types of new streets made in Coeln. Fig. 3 shows a section of the Hohenzollernring, which has a total width of 39·37 yards. There is a tram-line on each side of the central line of masts, which serve both to supply electricity to the cars and to support electric lamps. Fig. 4 shows a section of the Ring-street round the Town-Wood. The street has a width of 43·74 yards. The houses on each side have front gardens, each of which is 5·46 yards wide. The open space between the two lines of houses is therefore 54·66 yards wide. There is a broad central footpath between two of the rows of trees, and a cycle-track, and a road for riders on horseback, to the right of it.

Fig. 5 represents the building-plan of the "Villa-Colony" Marienburg and the South Park. It will be seen that nearly all the streets in this pleasantly situated district are planted with a double row of trees.

MANNHEIM.

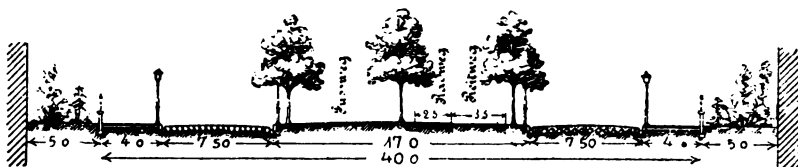
Some information respecting the municipal government of the town of Mannheim has already been given on page 29, and respecting its extension plans on pp. 28, 29. The amount of land owned by the town in the year 1900 was 4,060 acres. It has 18 public gardens, containing 103 acres of land, and 12 tree-planted streets, the length of which is $3\frac{1}{2}$ miles. Herr Beck, the Oberbuergermeister of Mannheim, has given much attention to the housing question, and in 1897 published a work on the subject, in which he considered more particularly the housing conditions of Mannheim. The book, which bears the title *Die Wohnungsfrage mit besonderer Beruecksichtigung der Mannheimer Verhaeltnisse*, is published by the Mannheimer Vereinsdruckerei. From it we translate the following summary of the recommendations made by Herr Beck respecting the future action of the Town Government of Mannheim :—

To recapitulate briefly, I should propose as the programme for the town of Mannheim with regard to the subject of dwelling reform :



Hohenzollerndung.

FIG. 3.



Stadtwaldgürtel.

FIG. 4.

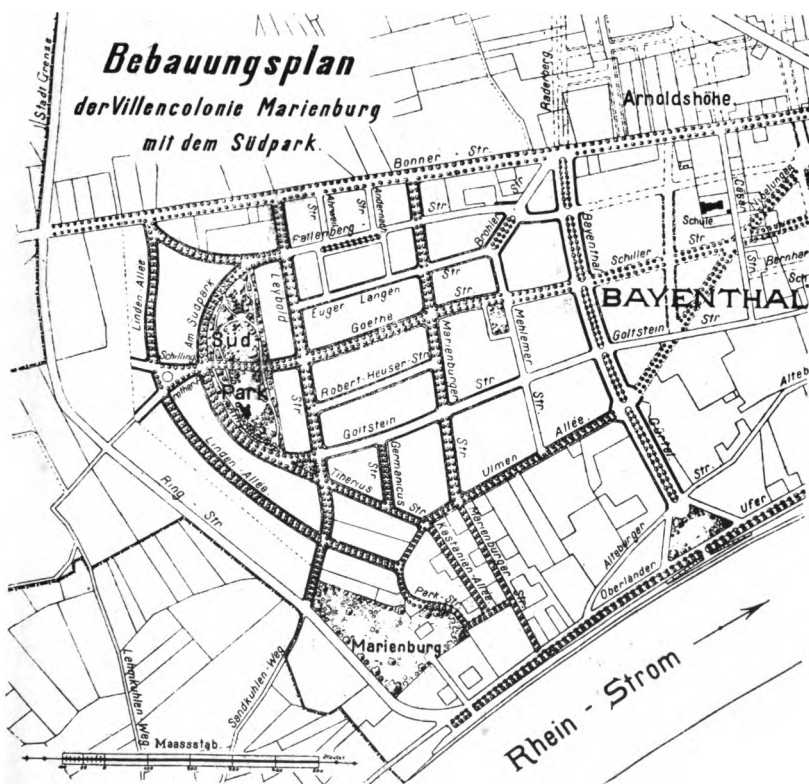


FIG. 5.

To face p. 152.

1. That the town erect gradually, as its means permit, houses to be let to the workpeople and the lower officials who are continuously employed by it, and that it adopt the principle that, if any important new work is started, dwellings, for all or some of the workmen and officials to be employed in it, must also be provided.

2. That to all societies and private persons who undertake to build and let workmen's dwellings the Town give help by remitting the usual charge for the cost of street-making, and, if necessary, of part or the whole of the cost of the site, if the conditions laid down by the Town, to ensure that the houses be of the right kind and be well maintained, are accepted.

3. That the Town promote the formation and development of all organisations which seek to provide suitable workpeople's dwellings, and especially of building societies of public utility.

The following measures would then be necessary :

4. Accelerated provision of building land, suitable, in respect of price, drainage, etc., for the erection of cheap dwellings; the construction in good time of streets, provided with sewers, water and gas, in the districts in question.

5. Publication of a special set of building-laws, with regulations facilitating the erection of dwellings in the districts referred to in No. 4; and energetic promotion of "open" building, *i.e.*, the building of detached and semi-detached dwellings.

6. Systematic inspection, at intervals of two or three years, of all workmen's dwellings.

7. Exact statistical returns at short intervals respecting dwelling conditions, showing the increase in the number of dwellings in relation to the increase of population; statistics respecting the number of empty dwellings, etc.

8. Active promotion of rapid and cheap transit, by means of tram-lines, between industrial parts of the town and the suburbs and newly-opened districts.

9. Formation of public promenades, gardens and playgrounds, which may offer some compensation, in the form of

fresh air, light and pleasant views, to adults, both sick and well, and to young people, for the privations which they have to endure in their homes.

THE BUILDING SOCIETY AT LENNEP.

The work of the Building Society "of Public Utility" at Lennep is an example of the good influence on the housing conditions of a small town of the co-operation of State Institutions and citizens of intelligence and public spirit.

Lennep is a town in the Rhine Province. In the year 1900 it had 9,704 inhabitants. Its Buergermeister, who was elected for a term of 12 years in 1897, receives a salary of £350. The Committee of the Society consists of the Buergermeister and seven members of the Town Council. The Society has provided good cheap dwellings for more than a tenth part of the whole population of Lennep. The *Zeitschrift fuer Wohnungswesen* of February 10, 1904, publishes the following extract from the last report:—"At the close of this year the Society can look back on fifteen years of useful work. In that time it has built 82 houses at a cost of £35, 145, and it has two more houses, not yet completed, the value of which, when they are finished, will be £1,285. Of the 82 houses, 8 have been sold; 74 are let, and of these, 24 are occupied by persons who are paying for them by instalments, and have already paid £1,322. The Society has share capital of £7,500. Its 750 shares of £10 each are held by 35 share-holders. There is a reserve fund of £325, and land still unbuilt on stands in the books at £191. In order to be able to build so many houses the Society obtained several loans from the National Bank of the Rhine Province and from the National Insurance Institution of the Rhine Province at Duesseldorf. The loans amount to £26,900. £1,885 has been repaid. The National Insurance Institution took over the claim of the National Bank, and is a creditor for £25,044. Half the amount is secured on mortgage. The Town of Lennep became security for the Society for £15,500, taking a second mortgage on the houses. The Society still holds 74 houses, in which there are 186 dwellings, 629 rooms, and 922 inmates. The average rents are 3s. a week for three rooms,

and 3s. 9d. a week for four rooms. These rents cover the cost of water supply. The dividends have lately been at the rate of $2\frac{1}{2}$ per cent. annually, and have never exceeded that rate."

NARROWER STREETS FOR TOWNS IN GERMANY.

Geheimer Baurat J. Stuebben, in a pamphlet on "The Significance for the Dwelling-System of Building Regulations and Town-Extension Plans,"* says (p. 28): "From the inconvenience, with regard to traffic and to light and air, which had hitherto been suffered in old streets and town districts, sprang the wish to make all new streets as wide and as straight as possible, and the resulting artificial uniformity and openness were regarded as beautiful. It was also believed that conditions needed for health were thus provided. But persons who had regard to hygiene soon called attention to the fact that the interests of health were not satisfied by general wideness and straightness of streets, but, in certain circumstances, were injured thereby. Broad streets certainly had advantages for traffic and in relation to supply of light and air; but, at the same time, they had disadvantages in respect of causing much dust and lacking shade, and especially through causing the ground to be covered with high buildings placed too close together. It was therefore seen that, while a well-considered net of broad streets for traffic must be provided for in extension plans, care must also be taken to provide narrower, trafficless streets, and thus to promote the building of the more desirable small dwelling house. Further, care must be taken, in preparing the plan, for an adequate supply of light and air in the interior of the blocks of building, for keeping streams pure, for open spaces and public shrubberies, and for the separation of manufacturing districts from the residential parts of the town."

PAYMENT BY OWNERS OF LAND OF PART OF THE COST OF IMPROVEMENTS WHICH INCREASE THE VALUE OF THEIR PROPERTY.

The Town Council of Charlottenburg has passed a resolution to the effect that those owners of land, the value of whose

* Die Bedeutung der Bauordnungen und Bebauungsplaene fuer das Wohnungswesen, von J. Stuebben, Goettingen, Vandenhoeck und Ruprecht, 1902, Preis 1 Mark.

property is increased by alterations made in the streets (such as the widening of streets) by the Town Council, by the construction of open spaces, public parks in the town, bridges, street crossings, etc., shall, each according to the degree in which he derives advantage from the improvements, jointly defray not more than five-sixths of the cost of the improvements. The new ordinance applies to all public works which were still being carried on on the 1st January, 1902, or have been begun since that date.—*Zeitschrift fuer Wohnungswesen*, July 10, 1903.

THE RATING IN FRANKFURT AM MAIN OF THE INCREASE OF REVENUE FROM LAND.

Towns in Germany, to which the Communal Taxes Law assigns rates on real property, have already dealt in various ways with the rating of increase of value of land. For example, in Berlin this has been done lately by increasing the rate charged by the city on the value of real property when it is sold. Frankfurt am Main, which was the first town to effect reform in this matter, has now made an important forward step. The Town Council has agreed to a rate on increase of value, which is thus graded:—No rate is charged on an increase of less than 30 per cent.; 5 per cent. is charged on an increase of from 30 to 49 per cent.; 10 per cent., on an increase of from 50 to 74 per cent.; and 20 per cent., on an increase of 74 per cent. or more. Such effective rating of "unearned increment" has hitherto been unknown. The experiment should, therefore, be welcomed, even if we consider that the limit of exemption is placed rather too high at 30 per cent.—*Soziale Praxis*, February 4, 1904.

THE INFLUENCE ON THE HOUSING QUESTION OF VERY LOW RAILWAY FARES.

We translate the following information from an article by Professor Emile Vandervelde, of Brussels, in *Soziale Praxis*, of August 13th, 1903.

Probably in no other country has so much been done, as has been done in Belgium, to enable working men, by

means of very low railway fares, to live at a distance from their work. In Belgium most of the railways are worked by the State, and more can, therefore, be done to make them as useful as possible to the community, than can be done where the object of working railways is the gain of as much profit as possible. For the last 13 years the Belgian Government, yielding to the urgent requests of manufacturers desirous to obtain cheap labour, has run workmen's trains on almost all lines at extraordinarily low fares, and at times arranged to suit the convenience of workpeople going to, and returning from, their work.

The following table gives the prices charged for workmen's tickets on the State Railways:—

Distance in miles.	1 Journey daily to and fro.				1 Journey to and fro. Available for week.				Distance in miles.	Single Journey daily.				
	6 days.		7 days.		s.		d.			6 days.		7 days.		
	s.	d.	s.	d.	s.	d.	s.	d.		s.	d.	s.	d.	
3 ...	0	9 $\frac{1}{4}$	...	0	11 $\frac{1}{4}$	...	0	3 $\frac{1}{2}$	3 ...	0	5 $\frac{3}{4}$	...	0	7 $\frac{1}{4}$
6 ...	1	0	...	1	2	...	0	5 $\frac{1}{4}$	6 ...	0	7 $\frac{3}{4}$	...	0	8 $\frac{3}{4}$
12 ...	1	2 $\frac{1}{2}$	...	1	5	...	0	8 $\frac{1}{4}$	12 ...	0	10 $\frac{1}{4}$	...	1	0 $\frac{1}{2}$
24 ...	1	7 $\frac{1}{4}$	...	1	10 $\frac{1}{4}$	...	0	9 $\frac{3}{4}$						
31 ...	1	9 $\frac{3}{4}$	...	2	1	...	0	10 $\frac{3}{4}$						
62 ...	2	6 $\frac{1}{4}$	...	2	10 $\frac{3}{4}$	...	1	4						
155 ...			...			...	2	4						

Thus for a weekly ticket, with which they can make six journeys to and fro, workmen pay only 1s. 9 $\frac{3}{4}$ d. for a distance of 31 miles, while ordinary travellers in third-class carriages pay 2s. 5 $\frac{1}{4}$ d. for one journey, to and fro, of the same distance.

This special tariff has been in existence since 1870. The Minister who established it seems to have had no other object than that of supplying the then-existing deficiency of workpeople. But this ministerial act, which hardly attracted any notice at the time, has caused the most profound revolution in the position of workmen that Belgium has experienced in the last quarter of a century. The vast increase in the number of workmen's weekly tickets sold is proof enough of the accuracy of this statement:—

The tickets issued in the year 1870 numbered ...	14,223
" " 1875 " ...	193,675
" " 1880 " ...	355,556
" " 1885 " ...	667,522
" " 1890 " ...	1,188,415
" " 1895 " ...	1,759,025
" " 1900 " ...	4,515,214
" " 1901 " ...	4,412,723

The largest number of tickets are sold to the workmen, employed by private firms and the State, who make six journeys a week and return each day to their homes. In 1901 these tickets numbered 3,479,430. The workmen who make only one double journey each week, returning to their homes on Saturday to spend Sunday with their families, are few in comparison with the others. In 1901 they bought 659,787 tickets. The number of tickets sold shows little variation in different months. Even in the months of January and February little, if any, diminution is caused by the usual pause in "season" industries, as the greater activity in sugar-works and in coal-mines customary in those months compensates for the effects of the pause. Contrary, therefore, to the general belief, it is found that a very large majority of the country people who seek work in towns, are regularly employed there, and we must estimate the average number of weekly tickets used each year by one man at between 40 and 50. According to this calculation, from 90,000 to 100,000 workmen travel daily on the State railways. If we add to these those who travel daily by the suburban tramways, the short local railways, and the lines worked by private companies, there must be more than 100,000 industrial workers, out of a total number of 900,000, who, although they are employed in towns, continue to live in the country, own a patch of ground, and, with the higher wages of the town, enjoy the economic advantages of country life. As a rule, the advantages outweigh the disadvantages of the railway travelling, unless the distances are excessive. In short, the industrial worker who lives in the country is better situated materially than either the country workman or the town workman.

At the beginning of his article Professor Vandervelde describes the effect of this system on the appearance of the country in Belgium in these words :—

Nothing surprises the traveller who goes from London to Brussels more than the contrast between the solitary stretches of pasture in Kent and the animated landscapes in the neighbourhood of Belgian towns. Enter Hesbaye or Flanders from whatever side one may, the country is everywhere thickly strewn with white red-roofed houses, some of them standing alone, others lying close together in populous villages. If, however, one spends a day in one of the villages—I mean one of those in which there is no local industry—one hardly sees a grown-up workman in the place, and almost believes that the population consists almost entirely of old people and children. But in the evening quite a different picture is seen. We find ourselves, for example, some twelve or thirteen miles from Brussels at a small railway-station in Brabant, say Rixensast, Genval or La Hulpe. A train of inordinate length, consisting almost entirely of third-class carriages, runs in. From the rapidly opened doors stream crowds of workmen, in dusty, dirty clothes, who cover all the platform as they rush to the doors, apparently in feverish eagerness to be the first to reach home where supper awaits them. And every quarter of an hour, from the beginning of dusk till well into the night, trains follow trains, discharge part of their human freight, and at all the villages along the line set down troops of workmen—masons, plasterers, paviors, carpenters with their tool-bags on their backs. Elsewhere it is colliers, miners, workmen in rolling-mills and foundries, who are coming from the Mons district, or Charleroi or Liège, some of them obliged to travel sixty or seventy miles to reach their homes in some world-forgotten nook in Flanders or Limburg. And on other parts of the railway, in Campine, in Flanders or the Ardennes, Antwerp dock labourers, weavers in the Roubaix and Tourcoing factories, metal workers, travel daily into France, and when their day's work is done return to the country place where they find their beds. In short, in Belgium there are few villages which do not contain a group of industrial workers who work at a distance, and often at a great distance, from their homes.

PREVENTION OF COAL-SMOKE.

§16 of the Regulations for the German Empire respecting Manufactures makes the previous consent of the Authorities necessary before, in any place, work can be begun which can cause annoyance to neighbours; and municipal authorities have the power to prevent manufactories from being erected except in certain districts. The use of these powers, unsupplemented by other action, would probably have the effect of preventing the "residential" parts of German towns from suffering as much from coal-smoke as most parts of large English towns suffer. But other protection from the evil is also given. If it can be shown that smoke coming from the chimneys of any building, whether it be a manufactory or a private house, is injurious to health, the person who is responsible for the production of the smoke is compelled to adopt the measures which are shown by experts to be fitted to prevent the evil. It is said that owing to the enforcement of the law, the amount of smoke now produced by the town of Hannover is only about one-third of the amount produced ten years ago.

SOME DIFFERENCES BETWEEN ENGLISH AND GERMAN TOWN-LIFE.

One of the objects of the foregoing pages has been to show that there is a very great difference between the views taken by English and German Authorities respecting the ways in which the "Housing Question" can be solved. In England our State and Municipal Governments appear to believe that all that is necessary for the solution of the question is that there shall be a sufficient supply of cheap dwellings, each of which is potentially wholesome, for tenants, who, when they enter on their tenancy, are in good health, who are then, and continue to be, of good habits, and who regularly earn sufficient wages to enable them to obtain enough food and clothing for themselves and their families and to pay their rents. So long as dwellings are well-planned, well-built, well-drained and sewered, and surrounded with an amount of open space which ensures that air and light shall not be cut off by neighbouring buildings, English Authorities and the whole community

appear to consider that, so far as the occupants of those dwellings are concerned, all has been done that needs to be done.

It has been shown that in Germany the Imperial, the State, and the Municipal Governments see that the housing question cannot be solved, except by measures which ensure that, not only shall there be an adequate supply of cheap, potentially wholesome dwellings, but also that both the immediate and the more distant environment of these dwellings shall be pleasant, and, in all other ways also, conducive to good health of body and mind.

It may be useful, in conclusion, to call attention to some of the results of these and of other differences between our English and the German methods of dealing with a matter, which has so close a connection with the housing question that it may be regarded as an integral part of that question—the training of those who are the tenants of workpeople's dwellings.

It is well known that there are persons, who, some on account of their bad habits, some on account of lack of physical or mental strength, some on account of illness, some on account of ignorance, cannot have wholesome dwellings; either because they make dwellings, which, if properly cared for, would be quite wholesome, unwholesome; or because they will not or cannot earn enough wages to be able to pay the rent of wholesome dwellings. Such persons form a much larger proportion of the population of English than of German towns. There is now a very marked contrast between the physical condition of the inhabitants of London and all other large English towns and those of Berlin and all other large German towns. The German towns contain a much larger proportion of tall, well-developed men and women than do the English towns, and in no large German towns is it possible to find such masses of undersized, ill-developed and sickly-looking people as are to be found in the poorer districts of London, Manchester, Liverpool, Birmingham, and all other large British towns. The contrast between the dress and the rest of the outward condition of the town populations of German and English towns is also very great. In Germany women in shabby and ragged clothes are very rarely seen; men in shabby and ragged clothes are seen

occasionally, intermixed with the rest of the population; but such collections of persons, badly washed and badly clothed, as are to be seen daily in Manchester in front of the Infirmary, and in every part of the poorer districts in Manchester and all other large English towns, are to be seen in no part of any German town.*

As might be inferred from the great superiority of the working-class inhabitants of German towns to the inhabitants of that class in English towns, in respect of cleanliness of person and of clothing, dirty and neglected dwellings are far less common in German than in English towns. English observers who visit the homes of German workpeople are generally surprised at the high average of orderliness and apparent comfort which they find in them; and, on the other hand, Germans who visit the homes of English workpeople in the poorer districts of our large towns are surprised to find so many dirty and neglected dwellings, and ask how it is that English workpeople, as a rule, have homes less well-cared for than those of German workpeople, though they earn higher wages than Germans, and pay rents which, except in London, are lower than those paid in large German towns, not only relatively to the amount of wages received, but absolutely, and, as a rule, occupy a kind of house, the "one-family-house," which is more easily kept in good order than is the kind of dwelling which is commonest in Germany, the tenement in a large, tall house. It is obvious that the housing question cannot be as satisfactorily dealt with in this country as it can be in Germany, unless most English workpeople can be made as able and willing to take proper care

*The writer of the very interesting series of articles on "Industrial Conditions in Germany," which have been published lately by *The Times*, says in the article published on October 13, 1903, after a reference to drunken men seen by him in Duesseldorf, "The Slavs are spirit drinkers, and the men I saw might have been of this race; they generally had a dilapidated appearance, which I have never seen among regular German workmen, who manage to maintain a remarkably high standard in this respect, even when in misfortune. I have seen hundreds of men out of work at the labour information offices in Berlin and other towns; they were never dilapidated, but always well-clothed and of good appearance."

of their dwellings as most German workpeople are; and experience has shown that to remove a family, which has neglected a bad dwelling, into a dwelling which, with care, would be a perfectly wholesome abode, generally does not suffice to change habits of neglect and toleration of dirt into habits of careful attention to cleanliness. It is, therefore, very important that we should, if possible, ascertain what are the chief causes of the difference between the average German workman's family and the average English workman's family.

DRINKING AND BETTING.

Two of the most prominent of the differences between the habits of workpeople here and those of German workpeople are that betting is very common among English workmen, and is not rare among English working women, while it is hardly found among German working people, and that drunkenness is much commoner among English than among German workmen, and is common among English working women and extremely rare among German women. The difference in respect of betting is remarkably great. We know that the habit is very common among members of the English working-class of both sexes and of nearly all ages. Professor Aschaffenburg, in a careful study* of the causes of crime in Germany, says that gambling there is too rare to have much influence on crime; and the testimony of the writer of the *Times* articles is to the same effect. Drunkenness has increased in Germany among workmen as wages have increased; and the increase of drinking has been greater than the increase of wages. Drunkenness and drinking are regarded by Professor Aschaffenburg as the chief causes of the crimes of violence which are very common in Germany, and as causes of a great deal of degeneracy in the children of drinkers. But drunkenness is still far less common among German than among English workpeople. Dr. H. Blocher and Dr. J. Landmann, in an estimate* of the expenditure on alcohol of

* Das Verbrechen und seine Bekämpfung, von Prof. Dr. G. Aschaffenburg, Carl Winter, Heidelberg, 1903. Price 7s.

* Die Belastung des Arbeiterbudgets durch den Alkoholgenuss, von Dr. H. Blocher und Dr. J. Landmann, F. Reinhardt, Basel, 1903. Price 1s.

a considerable number of workmen of various countries, which they have based on "workmen's budgets," state that the average expenditure of each of the English workmen's families on alcohol is to that of each of the German workmen's families as 54.28 to 46.27, if all the families are taken into account, but that, if the families which use no alcohol are left out of account, and only the families which drink alcohol are considered, then the proportion of the expenditure of the English workman's family is to that of the German family as 95.63 to 48.04. No trustworthy inference respecting the comparative expenditure on alcohol of most English and of most German workmen can be drawn from these calculations, as only a few hundred English "budgets" were examined. But the calculations may serve to explain why it is that, while quite as much is spent per head of the population on alcohol in Germany as in England, there is less drunkenness in Germany than here. As the figures indicate, a much larger proportion of our workpeople, than of German workpeople, use no alcohol, and of those who use it a larger proportion drink till they are drunk.

These differences of habit would by themselves account for a good deal of the difference between the homes and the dress of English and German town workpeople, but they do not account for all the difference, as many English town workpeople who do not drink or bet much have untidy clothing and homes. And the difference of habits in the use of alcohol, and in relation to betting, between German and English workpeople needs to be accounted for.

PHYSICAL AND MENTAL TRAINING.

Those persons who have lived in both English and German large towns, and who have studied the institutions of both countries, can have little difficulty in discovering at least some of the chief reasons for there being more drunkenness and betting among English than among German town workpeople, and for there being more neglect of order and cleanliness, on the part even of those English town workpeople who do not drink or bet, than is found in German towns, except in the homes of a small number of persons. In seeking to

discover the causes of the difference, it is necessary to remember that whatever improves the physical condition of a population, by causing its boys and girls, its men and women, to be taller, better-looking, and broader, muscularly and nervously stronger and more vigorous, than they would otherwise be, and at the same time develops in them a healthy appreciation of health and strength and good looks, and a wholesome pride in possessing those advantages, necessarily does much towards giving desire for the conditions which are most favourable for the maintenance of health, strength and good looks, and distaste for the conditions which are unfavourable to their maintenance. Hence, a population which receives during childhood and youth good physical training, especially if that training be accompanied by careful instruction of the mind respecting the value of health and strength, and respecting the means which can be used in the home for maintaining them, is, necessarily more inclined, than a population which has received no such training, to avoid drunkenness, to attend to cleanliness of body, clothing, and dwelling, and to value careful preparation of good food so highly as to be unwilling to waste earnings on the support of betting agents. The difference between the amount of care given for many years to the physical training of German children and youths, and to training their minds to value highly the results of good physical training and to understand how those results may be maintained in the home, and the amount of care hitherto given in this country to such work, is at least as great as the difference between the amounts of drunkenness and neglect of cleanliness found in Germany and England respectively. For a long time past all German boys have received careful gymnastic training in their schools, which has prepared for, and been continued by, the good physical training received by nearly all German youths in the army. Whatever may be the nature of the general influence of military training on German men—and in the case of the majority of men, it seems to be good,—that training unquestionably greatly improves the physique, and gives neat and orderly habits. And although the physical training of the schools chiefly influences only boys directly, and the direct influence of military training

is felt only by men, there can be no doubt that the indirect influence, both of school gymnastics and of military training, on most German women is very powerful, and strongly tends to promote attention to cleanliness and orderliness in dress and home, and preference of well-cooked food and wholesome recreation to drunkenness and betting. The German mother is led by the commonness of well set-up, neatly dressed boys to desire that her children shall be strong, well set-up and neatly dressed; and the German girl, seeing that most young men are tall, strong, well set-up and neatly dressed, naturally desires that her lover, and, later, her husband, too, shall be so. And of late years great care has been taken in elementary schools, by supplying the schools with ranges of shower-baths, provided with hot and cold water, and by placing the schools under the constant supervision of medical men, who give great attention to ventilation, the supply of light, and to cleanliness of the buildings, as well as to the defects and ailments of the scholars, not only to ensure that, while children are at school, they shall live under wholesome conditions, but also to ensure that children shall learn in school how to obtain in their homes the conditions most conducive to health.* Nor must it be forgotten that, just as good physical training and the establishment of conditions conducive to strength and good health, increase mental strength and vigour, so, on the other hand, wisely directed mental train-

* As an example of the efforts which are being made in all large German towns, not only to enable children to be as healthy as possible in body and mind while they are attending school, but also to give them at school the knowledge, tastes and habits which will make them able and wishful to continue to be healthy in mind and body when their school-life is over, the work done in connection with schools in Breslau may be mentioned. Breslau in the year 1900 had 422,709 inhabitants. It owns 12,658 acres of land; and institutions which are controlled by the Town Council own 3,335 acres. In the town there are parks and public gardens containing 409 acres of land, and 116 tree-planted streets, the length of which is 16½ miles. In the environment of the homes of the population there is, therefore, much which is conducive to good health. As in all other German schools, much time is given in the Breslau schools to physical exercises. Every school is provided with a weighing-machine, and in the first three months of every year all the children are weighed by the teachers, generally in the presence of the school-doctor. All the children are also carefully measured by the school-doctor. In 13 schools there are ranges of shower-baths, which are provided with hot and cold water. All children may, and most do, bathe once a week. The results are so good that all new schools are to be supplied with baths. Warm breakfasts are provided for poor children. The Town Council contribute £55. 10s. yearly to the cost. The rest of the cost is raised by subscription. During the summer the School Board enables scholars to bathe in the river without charge. On several afternoons, before and during the summer holidays, children are allowed to use the school playgrounds, where they are taught games, and are provided with all the necessary apparatus. Fees amounting to £75 are paid to the teachers and the school-attendants for their services. Since 1898 four plots of ground, in different parts of the town, which contain in all about an acre-and-a-half, have been used as gardens for scholars in elementary schools. Work is done only in out-of-school time. Any boy may have a patch of from 7 to 8 square yards, and all that it produces is his own. Part of each plot is cultivated by all the boys in common. Instruction in gardening is given by trained teachers. Tools are provided by the Town for those boys who have none of their own. In 1901 556 boys from 35 schools had patches of ground. Since 1881 a committee, the chairman of which at present is the Chief Inspector of Schools, has sent the delicate children of poor parents, chosen by the head-teachers, into the

ing increases desire for, and power to attain, physical strength and good health, and that German schools have long reached with good mental training a much larger proportion of the nation than in England has been reached by our elementary schools with their, on the whole, less effective mental training.

SMOKE AND SOOT.

Another difference between the influences affecting the life of the working class in German towns and those affecting the life of our town working class, which must be one of the causes of the greater commonness both of neglected homes and of drunkenness in this country, is the much greater filthiness of English than of German town air. Except perhaps Essen, there is no German town which has air so heavily laden with soot and other impurities as is the air of Manchester, much of London, Birmingham, Liverpool, and all our other large towns. This filthiness of the air makes it impossible in a town like Manchester to maintain a moderate degree of cleanliness of skin, hair, clothing and dwelling in houses where servants are not kept, unless the house-wife gives an inordinate amount of her time and strength to the struggle against dirt. In the University Settlement in Ancoats residents find that they must accept a standard of cleanliness for their dress and rooms much below that to which they have been accustomed, if they are not

country to "holiday-colonies," which are under the management of school-masters and school-mistresses. In the summer of 1902 there were 9 colonies for 434 children. The School-Authority provides head-teachers with the money needed to enable the poorest scholars to take part in "school-walks" to interesting places. In 1902 7,000 children received help, the cost being only £60. In winter 2,500 free tickets for sliding and skating, and 8,500 tickets, costing a half-penny each, for the same purpose, are distributed among scholars. There are 9 special schools in different parts of the town for "defective" children in which 426 children are taught. Every year there are classes on two afternoons a week for children who stammer or stutter. In the years 1901-2 648 children attended these classes. The School-Authority has arranged with the Institution for the Instruction of the Blind that all blind and almost-blind children shall be taught and fed daily in that Institution at the cost of the School-Authority. The parents of the children have to take them to and from the Institution. A similar arrangement has been made for the education of deaf-and-dumb children with the Deaf and Dumb Asylum. There are 130 elementary schools with 952 classes and 50,382 scholars, and 9 branch-schools with 19 classes, in Breslau. In 1901 all the schools were placed under the supervision of 25 school-doctors, each of whom receives annually a fee of £25. On an average each school-doctor has to supervise 2,000 scholars. The hygienic care of each set of school-buildings is entrusted to one doctor, though the children attending the school in some cases are under the charge of several school-doctors. The technical supervision of the work of the school-doctors rests with the Town-Doctor, who represents the school-doctors at meetings of the School-Authority, of which he is a member. The School-Authority has the right to summon a school-doctor to any of its meetings. It is the duty of each school-doctor to attend any meeting, to which he is invited, of the managers of a school which is under his care. At such a meeting he takes part in discussions but does not vote. The school-doctor must examine the buildings of the schools under his charge at least once a month and send suggestions to the Town-Doctor for remedying any defect which he notices. The school-doctor has to examine every fresh scholar who comes to a school, and to fill in particulars respecting its physical condition on the provided forms. He has to examine every delicate and sickly scholar at least once a month. He does not prescribe for scholars.

to be compelled to spend too much of their time and energy in efforts to keep near to the old standard. In houses where there are no servants, if sooty air be freely admitted, it causes a degree of dirtiness which is sure in the long run to be fatal to desire to preserve orderliness of surroundings, and which is very conducive to desire for alcohol. And if fresh air be excluded for the purpose of excluding soot, then the resulting impurity of the air is fatal to vigour and health, and produces sensations, which, like those produced by dirt and disorder, bring with them, to many of those who suffer from them, strong desire for stimulants.

A series of careful examinations of the air of different parts of Manchester, made a few years ago by Dr. Bailey and other members of the medical staff of the Owens College, showed that about half the amount of smoke produced in the town comes from domestic fires and the rest from manufactories, "works," etc. In Germany, as has been stated on p. 160, although no towns were ever so smoky as are our large towns, the amount of smoke produced now in some towns is less by two-thirds than the amount produced ten years ago, owing to the strict enforcement of the law. In this country no house-owner can be punished for the amount of smoke produced by a domestic fire-place, unless the chimney is "set on fire," and probably it would be impossible to obtain legislation to impose any penalty on a householder for producing coal-smoke. But, having regard to the greatness of the evil, and to the fact that not a few English people now see that it is extremely desirable to make our town populations stronger and healthier, it might be possible to induce Parliament to grant, and Town Councils to use, powers to remit a proportion of their rates to all tenants who caused their houses to attain a high degree of smokelessness. At first such a system would cause a town but little loss of rates, and for that loss it would receive compensation in purer air; and by the time that the remission of rates had to be granted to a majority of the inhabitants of a town, public opinion would probably make it possible to alter the law and impose heavier rating on the minority who continued to produce much smoke.

SEPARATION OF CLASSES.

Even more effective as a cause of great difference between the amounts of drunkenness and neglect of dwellings in Germany and England than the differences of training and of air, which have just been considered, and greatly enhancing the bad effect on English workpeople of those differences, and having its bad influence enhanced by theirs, is the influence of the great separation in space of people of different social classes effected by the inferiority, in respect of some matters of great importance, of our system of town-arrangement and government to the German system. In a German town, except quite lately in such towns as Essen and Elberfeld, and in the new manufacturing districts which have been created in towns, which, till lately have been, on the whole, commercial rather than manufacturing towns, rich people and poor people have together occupied the same streets, the same districts. Rich people and moderately rich people have lived, and, in most towns, still live, in the lower storeys, looking on the main street, of tall houses, in the upper storeys of which, entered by means of different doors and staircases, and in the back-buildings of which, also, live much poorer people. To this system there are serious drawbacks. Other things being equal, it is far less wholesome for women and children to live in upper rooms of tall houses than in the rooms of a "one-family house," from which the children can easily run into the open air, and which has no other dwellings above or below it, from which injurious exhalations may come. And dwellings in back-buildings, getting their air and light from courts, of which many of the older ones, are far too small, are often very unwholesome. And the proximity of poor to rich and moderately rich is often unpleasant for rich and poor, and doubtless partly accounts for the fact that hatred of the rich by the poor is commoner in Germany than in England. But the system, though it has disadvantages, has also very great advantages; and, while its disadvantages may be much reduced by making courts larger and by not allowing houses to have too many storeys, it is difficult to see how the advantages given by the

system can be obtained in any other way. Some of the advantages are: that, as rich and poor are always near to each other, the rich cannot forget that the poor exist and have need of their help, and that, owing to the nearness of the poor to the rich, it is easy for the rich to help the poor; that the children in families impoverished by the vice or the misfortunes of the parents, cannot fail to know that a fuller kind of life than their own exists in the world and may be attained by them, if they are sober, and industrious and succeed in maintaining good health; that the broad tree-planted streets and public gardens, which are sure to be provided near the homes of the richer inhabitants of a town, are, in this system, also near the homes of the poorer inhabitants; that the care sure to be taken by the municipal government to guard the air breathed by the rich from the worst kinds of pollution by smoke and chemical vapours, in this system protects also the air breathed by the poor; that the public libraries, the museums, art galleries and other institutions provided to supply instruction and recreation, in this system are as near to the poor as to the rich; that by this system the children of the poorer families are freed from the temptation, and, indeed, from the possibility, of forming the disorderly habits which in England are formed by the members of the gangs of boys and girls found in nearly all our poorer districts, as no such gangs can exist in a district inhabited by many rich people.

It is no exaggeration to say that in the great majority of German towns, owing to the intermixture of the homes of rich and poor, and the resulting pleasantness of the streets, there are no parts where a workman of steady habits, who earns enough to enable him to obtain a dwelling large enough for himself and his family, and to supply them and himself with enough food and clothing, cannot live a full and healthy life. That many German working people understand the advantage of the system is shown by the fact that, when, a year or two ago, it was proposed to build a large number of workmen's dwellings in Spandau at some distance from the rest of the town, the workmen, for whom the dwellings were intended, sent a memorial to the authorities, in which they begged that

they might not be separated from the rest of the community and be placed at a distance from all the educational and other institutions of the town. It has already been stated* that the very intelligent and zealous Municipal Government of Ulm are resolved that their town shall not suffer from the evils which necessarily spring from the existence of large districts inhabited only by working people.

Little need be said of our English system, in which districts are created that are occupied almost exclusively by working people. The statement which has just been made of the advantages of the German system indicates the disadvantages of the English system. But respecting one or two points a few more words should perhaps be said. It would be impossible to overstate the evil which results from the gathering together of the poorer classes and of the richer classes into separate districts which are at a considerable distance from each other. Even if the only result were mutual ignorance, that would be a great evil, but there are many other bad results. The influence of this ignorance is not less disastrous for the rich than for the poor; but if we think only of the result on the poor, it must be said, that, even if our working class districts were inhabited only by families living admirable lives, it would yet be impossible for thousands of children to know, in the years when their views of life are framed, that any fuller kind of life than the narrow life which alone is possible in a small house in a crowded and dirty town-district can be lived; and it is a great misfortune for the nation, which needs a large supply of able men, who use their powers to the full, that any children, born with the power to live a large full life, should be ignorant that such life can be lived. But, unfortunately, large as is the proportion of the families which live respectable lives in our poor districts, the minority who live a different kind of life is large enough to ensure that examples of evil shall be often before the eyes of all children in such districts. A good idea as to how children can come to think that drunkenness is a necessary part of normal life can be obtained from a single

* See page 109.

record of the experience of a Manchester clergyman. On his return to his home, in East Manchester, this clergyman's little son said to him gleefully, "Oh, Father, I have had such a lively day! I have seen five women run in by the police!"

No improvement in the housing conditions of our town population can have a very large effect in raising the level of civilisation and welfare, unless it is accompanied by successful efforts to intermix the dwellings of rich and poor.* If the air of our towns were made much freer from smoke and chemical vapours, probably the formation of some wide, tree-planted streets and many strips of public garden would ensure that many well-to-do families would live in and near our towns; but unless the air is made much purer, all efforts to induce well-to-do families to live in towns must be made in vain.

POOR RELIEF.

Another difference between the influences affecting the life of German and those affecting the life of English working people needs to be mentioned. In Germany the system of poor-relief, which is also a system for the prevention of poverty, known as the Elberfeld system, is in use in most of the large towns. In this system a small number of poor families are placed under the care of a member of the well-to-do class (which includes workmen who earn good wages) whose duty it is to make himself acquainted with the circumstances of each of the families, to give them advice respecting the best ways of

*At the meeting held in Dresden in September, 1903, to which reference has already been made on p. 11, Mr. Beutler, the Oberbuergermeister of Dresden, after speaking of the great improvement effected in some of the German towns, said respecting the disadvantages involved in filling large districts of towns with "one-family houses": "the manufacturing towns, consisting chiefly of buildings of two storeys, which I have seen—the large manufacturing towns, Leeds and Manchester,—certainly did not lead me to believe that there was greater cleanliness and more comfort among the working people, and that conditions more favourable to health existed there than with us. Quite the contrary, our manufacturing towns, Essen, Barmen, Elberfeld, Chemnitz, Glauchau, Meerane and the rest, will be preferred unconditionally by every impartial observer who has seen, not only the outside, but also the inside, of the workpeople's dwellings. . . . I cannot admit that the English 'one-family house' is in itself a sign of higher civilisation."

getting work if any members of the families are out of work, and, if they need help in money, to obtain it for them after careful consultation with other persons charged with similar duties. Each person has so few families allotted to him—if possible not more than five, and rarely more than ten—that it is possible for him to give a good deal of thought and attention to each. Obviously this system is not only better adapted than ours for the purpose of giving help to those who need it, but is also well-adapted, and ours is not, for the other very important purpose of preventing poor families from becoming pauperised. The system is more easily worked in Germany than it would be here, as it is the legal duty of every citizen in Germany to accept some unpaid office, and, if he fails to perform the duties of his office, he is punished for his neglect by a fine. But a large proportion of those who take part in the work, though they may begin to do so to avoid the fine, or to avoid the discredit which attaches to a refusal to fulfil their duty to the community, continue long after the term of three years, during which it is their legal duty to serve, has expired, to perform their share of the work because they know how useful that work is both to the poor and to the rest of the community. Thus in Coeln, in 1901, of the 69 honorary superintendents then in office, 47 had served for more than six years, and of the 789 honorary “helpers of the poor” then in office 377 had served for more than six years, and 567 for longer than three years. To ensure that each of the helpers, who, as a rule, are men engaged in business or in professions, shall not have more work than he can attend to, a large number have to be appointed. The number in office in Coeln, which had a population of 372,529 in 1900, has already been stated. Dresden, which in 1900 had 396,146 inhabitants, has 778 helpers. Hamburg, in 1902, with 727,721 inhabitants, had 1,563 helpers, each of whom, on an average, had the care of 11·8 poor persons. An interesting account of the “Elberfeld” system is given in “Britain’s next Campaign,”* by Miss Julie Sutter; much information respecting the working of the system, and the extent to which it has

* R. Brimley Johnson, 1903, price 1s.

been adopted is given in *Das Elberfelder System*,† by Dr. Muensterberg; and a history of the system in Hamburg from its introduction in 1778 to 1902, which, with valuable information respecting its cost and the results obtained, is contained in a work‡ published by the Armen-Kollegium in Hamburg, who most kindly give copies to persons interested in the system.

INSURANCE.

It is well-known to all who study the housing question that the smallness of the earnings of a large proportion of working class families, and the irregularity of the earnings of a large number, are amongst the chief causes of bad housing. Illness, physical weakness, and accidents are, of course, amongst the chief causes of low and irregular earnings, while low and irregular earnings, in their, turn, cause much illness and physical weakness. Hence, if any means can be devised for making the income of workpeople less irregular, for preventing illness and physical weakness and accident, when they do occur, from reducing the income of those who suffer from them as much as such evils now do, and for improving the health and increasing the physical strength of workers, not only will a great deal of suffering be prevented directly by the use of those means, but, also, as the use of the means will greatly improve housing, it will, in that way also, effect a great diminution of suffering. It may safely be claimed for the new German system of the Insurance of Workpeople, and for the work for the improvement of health which is closely connected with that system, that, together, they form the largest and the most successful attempt made anywhere for a very long time to improve the condition of the working class.

The first part of the great system of Insurance—a system which was truly described by Bismarck as “practical Christianity,”—was created by the passing in the year 1883 of

† Duncker and Humblot, Leipzig, 1903. Price 1s. 6d.

‡ Das Oeffentliche Armenwesen in Hamburg waehrend der Jahre 1893—1902. Herausgegeben vom Armen-Collegium, Hamburg, 1903.

an Act dealing with Insurance for Illness. This was followed by the passing, in July, 1884, of an Act establishing Insurance for Accidents, and in June, 1889, by an Act establishing a system of Insurance for Infirmary and Old Age. Many subsequent acts have been passed developing the three different kinds of insurance, the latest of which is an act extending the time during which payment is made in cases of illness from 13 to 26 weeks, and largely adding to the number of persons for whom it is a legal duty to insure. It is known that further alterations and extensions of the system are to be effected by legislation in the near future. Already the system is so wide that it is said that "whoever works is insured." It would be impossible to give an adequate explanation here of so large and complicated a system, but some of its principal provisions may be mentioned. The clearest short explanation which has appeared in England is contained in an article on "Workmen's Insurance" published in *The Times* of October 21, 1903, as one of a series of papers on industrial conditions in Germany. From this some quotations will be made here. A simple German explanation of the system will be found in "Ratgeber fuer Versicherte,"* von H. Hellwig, and a fuller account in Wengler's "Krankenversicherung," "Unfallversicherung," and "Invaliditaets- und Altersversicherung," three volumes of Weber's "Illustrierte Katechismen."†

INSURANCE FOR SICKNESS.

All workpeople in Germany, native and foreign, male and female, who are employed in hand-work, or in such other kinds of work as are carried on in mills, works, in mines, on buildings, in home industries, etc.; as well as all persons, with salaries not exceeding £100 a year, who are employed in trade, commerce, or in the offices of lawyers, in insurance offices, etc., must be insured. The obligation to insure can be extended to all persons employed on the land and in forests, and to those who carry on home-industries on their own account.

* Stephan Geibel, Altenburg, price 15 Pfennig.

† J. J. Weber, Leipzig, price 2s. each volume.

Domestic servants, and all persons to whom the obligation to insure can be extended, have the right to insure in the system.

As a rule the amount of wages received, except in the cases already mentioned, does not affect the duty of insuring.

There are several different kinds of Offices in the system, some of which in cases of illness give more, but the majority of which do not give more, than the "legal minimum." The "legal minimum" includes:—

1. Free medical attendance and medicine, with such things as spectacles, bandages, etc., from the beginning of illness.

2. In case of inability to work, from the third day from the day on which illness begins, an allowance in money for every working day of half the amount of the daily wage, on the amount of which the premium is based; or, under certain circumstances, instead of this allowance in money, free attendance and maintenance in a hospital, with an allowance in money for those dependent on the sick person of quarter the daily wage, these arrangements continuing for a period of 26 weeks.

Some of the Offices also give:—

3. burial money of twenty times the amount of an average day's wage, and

4. for women who have been confined an allowance equal in amount to sickness-money for a period of six weeks.

The number of authorised Sick Insurance Offices in Germany is more than 23,000, and the number of persons insured in them is between nine and ten millions. The amount of premium payable for sick insurance varies from $1\frac{1}{2}$ to 3 per cent. of the average earnings of those who are insured.

The premium, for each workman who has an employer, is paid by the employer, who deducts two-thirds of the premium from the workman's wages, and must himself bear the burden of the other third.

By-laws can be adopted which raise the legal minimum. In this way sick-relief can be continued for a year; its amount can be raised to 75 per cent. of the average daily wage, and the burial money can be increased to forty-times the amount of the average daily wage; the money allowance can be paid for

the first three days and for Sundays and holidays, and sick-relief can be extended to members of the family of the insured person, and to convalescents.

INSURANCE FOR ACCIDENTS.

Workpeople, whatever be their wages, and those officials whose salaries do not exceed £150 yearly, who are employed in any kind of works, manufactories, quarries, etc., occupations connected with commerce, in agriculture, in forest-work, the postal and other state services, railways, on buildings, and on sea-going vessels, are insured against the results of accidents which happen to them while they are engaged in their employment. The cost of the insurance against the results of accident of all such persons is borne by their employers.

The obligation to insure can be extended by by-law to all persons carrying on work, whose incomes do not exceed £150 yearly, or who do not regularly employ more than two workpeople, as well as to officials who receive more than £150 a year.

Persons carrying on work, who do not earn more than £150 a year, or do not employ more than two workpeople regularly, have the right to insure against the results of accident.

If an accident happens to a person who is insured, while he is at work, the Association in which he is insured gives him from the beginning of the 14th week from the occurrence of the accident (during the first 13 weeks he receives relief from the Sick-Insurance system or from his employer):—

1. Free surgical or medical treatment, medicines and other curative appliances, and such apparatus as crutches, supports, etc.

2. An allowance so long as inability to work continues. The allowance amounts:—

- (a) In case there is total inability to work, to two-thirds of the wages hitherto earned. (This is called "full allowance").

- (b) In case of partial disablement a corresponding proportion of the "full allowance."

- (c) If the injured workman is not only quite unable to work, but, also, so helpless that he must receive help from other

persons, the "full allowance" is raised to the whole amount of the wages previously earned.

(f) So long as the injured man, is out of work, owing to his accident and without any fault of his own, the Association can for the time raise his partial allowance to "full allowance."

If the accident causes death, then as additional compensation there must be given:—

1. As burial-money the fifteenth part of a year's wages, which must not be less than £2. 10s.,

2. An allowance to the members of the dead man's family which must begin from the day of death.

(a) The allowance for a widow, till her death or remarriage, and for a child till it has completed its fifteenth year, is 20 per cent. of the amount of a year's wages.

(b) In case the widow marries again, she receives 60 per cent. of the amount of a year's wages in one sum; and is thus paid off.

(c) If a woman, who by her earnings supports her family, owing to her husband's inability to do so, is killed by an accident, the widower, so long as the family are in need, receives 20 per cent., and each of the children till it has completed its 15th year, also receives 20 per cent., of the amount of the wages she had earned.

All the allowance must not, together, exceed 60 per cent. of the amount of the wages previously earned. If the separate allowances would together amount to more than that proportion, they are all reduced.

As has already been mentioned, the allowance for an injured person is provided during the first 13 weeks after the occurrence of the accident by the Sick-Insurance Office, or by the man's employer.

From the beginning of the 5th week from the occurrence of the accident till the close of the 13th week, the sick-allowance must be raised, by an addition paid by the employer, to at least two-thirds of the amount of the wage on which the amount of the premiums was based. The Sick-Insurance Office must pay this addition with the sick-allowance, and must recover it from the employer.

So long as an injured person is being treated in a hospital, the members of his family are entitled to receive the same allowance which they would be entitled to receive in case of his death.

The allowances to an injured man are based on the amount of remuneration which he received during the last year of his employment, but if that amount exceeded £75, only one-third part of the excess is taken into account.

The number of persons insured in 1901 against the results of accidents was nearly nineteen millions; the number in receipt of allowances was 476,260. The amount of compensation paid was £4,927,790.

INSURANCE FOR INFIRMITY AND OLD AGE.*

The infirmity law is the latest of the insurance provisions for workpeople by the State, and it is the most comprehensive. It applies compulsorily to all persons over 16 years of age who work for wages or for salaries up to £100 a year, with the exception of those Government and other public officials who are otherwise provided for. Persons in receipt of more than £100 but not more than £150 have the right of voluntary insurance. This law is a continuation of the previous legislation initiated under Kaiser Wilhelm I., who left the completion of the scheme to his successors. . . .

Its object is to secure an allowance for infirmity or for old age. The condition for the first is incapacity to earn a living lasting at least 26 weeks, and for the second the completion of 70 years, whether accompanied by any infirmity or not. In addition it is required that in order to be entitled to either allowance the claimant shall have been insured for a fixed period, which is called the time of waiting; for an infirmity allowance it is 200 weeks if 100 have already been paid, and 500 if they have not; for an old-age allowance it is 1,200 weeks. As part of such waiting time are reckoned the term of military service and any period of inability to pursue a trade through illness. The allowances are reckoned in

* The following description of "Infirmity Insurance" is, by the kind permission of *The Times*, taken from its article of October 21st, 1903.

five classes, according to the annual income of the pensioner—(1) Up to £17. 10s., (2) £27. 10s., (3) £42. 10s., (4) £57. 10s., and (5) over £57. 10s. The old-age pension for each class is: (1) £5 10s., (2) £7, (3) £8. 10s., (4) £10, and (5) £11. 10s. The infirmity allowance is reckoned from the following basis for each class—(1) £5. 10s., (2) £6, (3) £6. 10s., (4) £7, and (5) £7. 10s., to which an addition is made in proportion to the length of time during which insurance has been maintained—namely 3pf., 6pf., 8pf., 10pf., and 12pf.* respectively for every week. The allowances are paid monthly in advance through the post.

In addition to these main provisions payments are made under certain conditions on the occasions of marriage, disabling accident and death.

The insurance fund is provided by regular payments, divided equally between employers and employed, which at present stand at 14pf., 20pf., 24pf., 30pf., and 36pf. (roughly, from 1½d. to 4½d.) a week for the respective classes. The State adds 50s. for each allowance paid. The contributions are paid in by means of stamps, which are on sale at post-offices and are affixed to cards carried by the insured persons. The stamps are provided by the employer, who deducts half the value from the wages; they are affixed at the time of paying wages and are good for one, two, or 13 weeks, according as wages are paid weekly, fortnightly, or quarterly.

The insurance is administered by special offices or institutes, established for large districts or for whole States. Each has a president, who possesses the standing of a Government official, and a committee composed of an equal number of representatives of employers and employed (not less than five of each).

For persons in the public service who come under the insurance law provision is made by means of special funds.

An important additional point is a provision for insured persons who are incapacitated by illness from earning their living. In such cases the insurance office is empowered to undertake the medical treatment of the sick person in a hospital

* The Pfennig is worth 1½d.

or sanatorium; and if the person is subject to sick insurance, the obligations of the latter pass to the infirmity insurance, which is reimbursed from the sick fund in proportion to the claims of the sick person.

AVERAGE AMOUNT OF ALLOWANCES.

Year.	Infirmity.						Old age.	
	£ s.						£	s.
1897	6	10	...	6	18
1898	6	11	...	7	1
1899	7	2	...	7	5
1900	7	6	...	7	10

The foregoing bare outline of facts, without any complications, will give the reader unacquainted with the subject some idea of the character and scope of this gigantic system. Year by year its operations become larger, as the following summary figures for 1902 will show. On account of sickness 4,800,000 persons received £10,300,000 benefit; for accidents 384,566 persons received £5,360,000; for infirmity 1,100,000 persons received £6,050,000—total, 6,735,000 persons benefited to the extent of £21,700,000. In 1891 the total amount paid was only £2,030,000. The benefit has therefore increased more than tenfold in eleven years. Of the total amount £2,070,000 was contributed by the State, £10,500,000 by employers, and £9,100,000 by the insured. That is to say, the workpeople received some £12,600,000, or £35,000 a day beyond the amount of their own contributions. That is really a very solid sum and a pretty heavy tax on employers in addition to the compensation for injuries.

I said above that presumably what they are buying is the efficiency and contentment of labour, and asked if they get their money's worth. As an observer, able to regard the situation in perspective and without prejudice, I am strongly of opinion that they do.

Take contentment first. The working classes are not contented, of course; who is? But their discontent in the mass takes the mildest form of expression—votes for social democratic candidates in the Reichstag elections. I cannot discuss the

social democracy here at the end of an article, and will merely observe that its increasing success at the polls is not alarming, for as it succeeds it changes. Its power means something, no doubt; it means legislation in favour of labour, but it does not mean anything revolutionary.

THE FUNDS OF INSURANCE INSTITUTIONS.

Very large amounts of money are received by the Insurance Institutions, and a great part of these funds has to be invested. Of the amount to be invested the Institutions use a proportion, which becomes larger almost every year, for the purpose of increasing the supply of wholesome dwellings for workpeople. Examples of help thus given to Building Societies have been mentioned on pp. 40, 50, and elsewhere in this volume.

THE CURE AND THE PREVENTION OF TUBERCULOSIS.

It is, of course, one of the objects of this vast system of insurance to enable the largest possible proportion of the persons who are suffering from acute or chronic illness to return to their work as soon as it is safe for them to do so. This object is sought for the two purposes of lessening as much as possible the sufferings of the persons insured, and of causing the system to be as little costly to the community as possible. For its attainment large use has to be made of the power given by the insurance-acts to remove persons who suffer from illness from their homes to hospitals and sanatoria.

It has been found that a very large proportion of the persons who need allowances for illness or for infirmity suffer from tuberculosis. Of every 100,000 persons alive on January 1st. in Prussia, there died on an average, during the year of tuberculosis, in 1896, 220·7; in 1897, 218·1; in 1898, 200·8; in 1899, 207·1; in 1900, 211·7. Of about 158,000 persons, who in 1898 received allowances on account of "infirmity," 11 per cent. were made infirm by tuberculosis. And of 1,000 men, aged from 20 to 24 years, who received allowances, 549 were made infirm by tuberculosis. In Germany discovery of the tubercle-bacillus, and the farther discovery that it is possible to treat many cases of tuberculosis successfully by means of fresh air and appro-

priate diet, led in 1896 to the beginning of a systematic attack on the disease. Some of the results of this attack are described by Dr. Julian Marcuse in an article in *Soziale Praxis* of July 23, 1903, of which part is here reproduced.

The number of sanatoria for the treatment of tuberculosis in Germany amounts to-day to 74. They contain 7,200 beds, and as each patient remains, on an average, three months under treatment, nearly 30,000 cases can be treated annually. Some of these institutions have been built by philanthropic societies, but the great majority by Insurance Associations, which have already spent more than £1,500,000 on the construction of sanatoria. In 1897 the Insurance Associations treated 3,200 patients. In 1902 the number had risen to 16,489. The annual average cost of a patient rose from £17. 8s. in 1897 to £18 in 1902. The results obtained in the sanatoria seemed at first most satisfactory. Returns prepared in 1899 by the Imperial Health-Office showed that of 2,259 patients who had left the sanatoria 72·2 per cent. were able to work. Statistics, published by the Imperial Insurance Office, respecting 8,200 insured persons, who had been treated in hospitals in the years 1897 and 1898, showed about the same proportion of cures. The results obtained in more recent years are still more favourable.

Unfortunately, it is found that in a large proportion of these cases of recovery of working power, the power is again lost when the apparently cured persons return to their homes and ordinary occupations. Thus, while the patients who in 1897 recovered power to work amounted at the end of that year to 68 per cent. of the number of patients treated, the proportion still able in 1898 to work had fallen to 44 per cent., and in 1899—1900 to 30 per cent., and in 1901 to 27 per cent. Of the patients who recovered their power to work in the years 1898 and 1899, not quite so large a proportion lost it again in the following years; but in their case also the retrogression is so great as to show that the results obtained will not last more than a few years.

The general enthusiasm for the treatment of tuberculosis in sanatoria has not been damped by the publication of these statistics, nor has desire to cover the German Empire with a network of such institutions been lessened. For this method of

treatment is the only one which deserves to be taken into account. But the purely bacteriological point of view has been generally abandoned, and the influence of the way in which people live on the origination and propagation of the disease has met with due recognition. Hence proposals have been made for the creation of many different methods for supplementing the care of those who have been treated in sanatoria. Such measures as the care of the patient's family while he is being attended to in a sanatorium, finding him wholesome occupation when he leaves it, the creation of country settlements for those who have been in sanatoria, of convalescent-homes, and of asylums for incurable cases of tuberculosis, all deserve support.

But the most elementary part of the attack on the disease is that of prevention, of giving protection against enfeebling influences which predispose the system for the reception of the dangerous poison, and prepare the way for its further distribution. And these influences are chiefly concentrated in the dwelling. In 1899 Rubner, at the International Congress on Tuberculosis, made the assertion which has not been contradicted, that the degree in which tuberculosis exists is proportionate to the degree of crowding in dwellings. It is not so much a question of the degree in which different parts of a district are covered with buildings, though that makes a difference, but chiefly of the degree in which buildings and separate rooms are filled with people. The occupation of insufficient space by several persons is the first and most fruitful condition for causing a dwelling to help to spread tuberculosis. The inmates are always in close contact, and no further evidence is needed to show that in such circumstances a consumptive person must injuriously affect his companions. All overcrowded dwellings are unwholesome. It is very seldom that rooms in them are moderately clean and orderly. The unwholesomeness cannot be laid only to the charge of individuals and families, but is partly due to the imperfect care exercised by the municipal authorities, to lack of air, lack of light, wrong arrangement of windows, difficulty in obtaining water, gross insufficiency in the supply of closets. Lack of light always means lack of cleanliness, and, moreover, light possesses, in

relation to all the causes of infection known to us, the special power of weakening and annihilating their pernicious influence. Like the rest, the tubercle-bacillus resists light only for a short time. Where light comes, it gives men important help in their efforts towards cleanliness, and the craving for light is an instinctive impulse towards resisting disease.

Such rooms as have been described are, however, well-fitted not only to pass tuberculosis from those who already have it to healthy persons, but also to create a predisposition to disease, which is necessary for the completion of the process of infection by tuberculosis. The air exhaled from the lungs, which ought to mix with at least eighty-times its own volume of fresh air, in crowded rooms mixes with only seven-times its own volume of fresh air, or with even less than that, before it is again inhaled. In such rooms, therefore, that which is breathed consists in considerable measure of the gaseous exhalations of other persons. To remain in such air makes sleep restless, causes a sense of oppression in the head, and a general feeling of discomfort, lessens appetite, and interferes with the normal formation of blood. With these conditions are associated further wrong relations in the change of tissue and in breathing, so that eventually the lungs of persons who live in such air are affected by conditions which weaken them. Thus the dwellings can influence the rise and spread of tuberculosis in three ways :

1. By causing direct contact between different persons.
2. By causing uncleanness, which, owing to overcrowding, is the rule in small dwellings.

3. By increasing predisposition to tuberculosis, partly by directly injuring the lungs, which are the organ most frequently attacked by it in grown-up persons, partly by bringing on a condition of the internal organs which causes a deterioration of the blood.

This shows the fundamental importance of the housing question in relation to the prevention of consumption. If the attack on this scourge is to be successful, all levers must be applied at this spot. The first tasks which ought to be undertaken are systematic examinations of the housing conditions

under which consumptive persons are living, partly for the purpose of making the danger caused by these conditions generally known, and of thus doing something towards bringing about the urgently needed reform of housing; and partly for the purpose of discovering ways and means of destroying the pestilential nests of the tubercle-bacillus.

Such investigations have already been made at various times and in various places.* So long ago as 1890, Kugler proved the connection between crowding and tuberculosis in Baden, and extended his observations to the rural townships. He showed how many rooms are used by 1,000 persons in each governmental district in Baden, and with the results compared the number of deaths from tuberculosis per 1,000 inhabitants in the same districts. He thus obtained the following groups:—

* The relation of density of population to the prevalence of consumption was long ago shown by the investigations of English men of science. In his Milroy Lectures delivered in the year 1890, Dr. Arthur Ransome says: "In one of his early letters to the Registrar-General, Dr. Farr gave some statistical evidence to show that the mortality from diseases of the respiratory organs and from phthisis is in direct ratio to the density of population. The following table is drawn from the annual report.

TABLE VII.

Mean Mortality in three groups of the Thirty-two Metropolitan Districts, 1839.

Districts.	Square yards to one person.	Totals.	Annual Rate per 100,000. Respiratory Organs.	Phthisis.
1 to 10	57	3,321	822	478
11 to 20	78	2,839	768	451
21 to 30	217	2,169	588	354

Dr. Parkes, in his work on hygiene, gives numerous instances of the influence of re-breathed air in the production of phthisis—instances drawn from the history of prisons, gaols, and workhouses." Dr. Ransome, in a paper on "Tubercular Infective Areas," read in 1888 to the Epidemiological Society, gave the details of an enquiry made into the incidence of phthisis in some of the worst districts of Manchester and Salford. The "results showed that the portions of these districts most affected by the disease were the close courts and alleys, the shut-in or blocked-up lanes, and above all the houses built back-to-back with no thorough ventilation. I especially noted the cases in which, in the space of five or six years included in the inquiry, double or treble occurrence of the disease had taken place in the same houses, and I found them very numerous."

	Number of Rooms for 1,000 Persons. By Census of 1885.	Deaths from Tuberculosis for 1,000 Persons. Average of 1882 to 1887.
1st group	815	2·29
2nd „	745	2·66
3rd „	645	3·10
4th „	547	3·20
5th „	470	3·23

In order to ascertain whether the influence of this factor, which is obviously so powerful in these cases, has much effect in purely country districts also, the groups were reformed with the omission of the eight largest towns found in the districts, with the following result:—

	Number of Rooms for 1,000 Persons.	Deaths from Tuberculosis for 1,000 Persons.
1st group, more than 800	800	2·20
2nd „ „ „ 700	700	2·60
3rd „ „ „ 600	600	2·73
4th „ „ „ 500	500	3·03
5th „ „ „ 400	400	3·35

The struggle with tuberculosis must now be carried on to a large extent by measures which begin, and which end, in the improvement of dwellings, unless the formation of sanatoria, the result of such splendid enthusiasm and such great sacrifices, is to prove a melancholy fiasco.

OVERCROWDING AND TUBERCULOSIS IN MANNHEIM.

An investigation which has been recently made, and the results of which are described in the *Zeitschrift fuer Wohnungswesen* of January 10th, 1904, shows very clearly the connection between overcrowding and the prevalence of consumption. With the help of the Statistical Department of the Municipal Government of Mannheim, Mr. Carl Freudenberg, a manufacturer in Weinheim, has made an enquiry respecting the dwellings of 2,900 persons who died in Mannheim in the years 1901 and 1902. In over 300 cases consumption was the cause of death. Mr. Freudenberg divides the families, of which the persons who died were members, into five classes: (1) families, each of which occupied 6 or more rooms; (2) families,

each of which occupied 4 or 5 rooms; (3) families occupying not more than 3 rooms, each room having less than 2 occupants; (4) families occupying not more than 3 rooms, each room having 2 or 3 occupants; (5) families occupying not more than 3 rooms, each room having more than 3 occupants. The proportion borne by the deaths from consumption to all the deaths for these 5 classes was: for No. 1, 10·3 per cent.; for No. 2, 22·2 per cent.; for No. 3, 23·4 per cent.; for No. 4, 34·0 per cent.; and for No. 5, 42·2 per cent. No connection between the ages of the houses and the number of cases of consumption occurring in them could be discovered.

TREATMENT OF TUBERCULOSIS IN SANATORIA AND ITS RESULTS.

The statistics of the cases of illness treated by the Infirmary-Insurance Institutions in the years 1898 to 1902 have recently been published by the Reichs-Versicherungsamt, and a summary of them is given in the *Reichs-Arbeitsblatt* for October, 1903. All the figures show progressive improvement from 1898 to 1902. The number of persons treated has greatly increased. The number in 1898 was 13,758; in 1899, 20,039; in 1900, 27,427; in 1901, 32,710; and in 1902, 35,949. Of the 35,949 persons treated in 1902 16,518 suffered from tuberculosis and 19,433 from other diseases. The cost of treatment has increased with the number treated. The total cost in 1902 for all diseases was £452,812. The average cost of treatment of each tuberculosis patient was £17. 14s. Of the whole cost, £45,813 was for the support of persons dependent on patients. The treatment in sanatoria of persons suffering from tuberculosis consists in an abundant supply of fresh air, plentiful food, attention to the skin, and instruction respecting health. A larger proportion of the patients who have recovered power to work in recent years, than of those who recovered the power in earlier years, have retained the power after the lapse of some time. Whilst of all the tuberculous patients treated in 1898 45 per cent. were still able to work after the lapse of the first, and 38 per cent. after the lapse of the second year, following the close of the year of treatment, the returns of the tuberculous patients of 1899 show

48 per cent. and 40 per cent. still able to work after the lapse of one and two years, and those of 1900, 49 per cent. and 41 per cent. Of the whole number of tuberculous patients treated in 1901 no smaller a proportion than 55 per cent. were still able to work after the lapse of a year from the close of the year of treatment. In the case of the tuberculous patients of the years 1898 and 1899 the diminution which took place in the number of those who were still able to work, from the end of the second year following the close of the year of treatment to the end of the third year, was only 5 per cent. And after the end of the fourth year, from the close of the year in which treatment was received, the diminution in the number of those who retain power to work is only small—about 2 per cent. It is perhaps necessary to say that the words “year of treatment” mean “year in which treatment was received.” The average time spent by a patient in a sanatorium is about three months. The chief results are shown in the table on p. 190.

The fact that so large a proportion of the persons, who recover in sanatoria power to work, lose the power again on returning to their homes, shows that Dr. Marcuse is right in saying that the formation of sanatoria will be a melancholy failure, unless a great improvement be effected in the housing of the working class. On the other hand, the fact that, of persons weakened by many years of wrong conditions of life, and still further weakened by consumption, so large a proportion as 35 per cent. have the power to earn a living restored to them for three years by the enjoyment, for only three months, of a sufficiency of air, light, food and cleanliness,—this fact should suffice to encourage all who have any share in the guidance and government of the community to decide that all that it is possible for them to do shall be done, to ensure that all schools shall be provided with a sufficiency of air, light, and all that facilitates the acquisition of cleanly habits, and shall teach all children the laws of health; that all houses in which workpeople live, and all places where they work, shall also be provided with an ample supply of air, light and the means of attaining cleanliness; and that every effort shall be made to enable and induce English people to use for the purchase of wholesome and

SANATORIA FOR TUBERCULOSIS.

		For 100 continuously treated and observed persons.																	
		For 100 persons continuously treated		To the end of the Year.															
Cure was effected at close of treatment, so that infirmity was not to be dreaded in calculable time; in the Year		The cure of 1898 continued	The cure of 1899 continued	The cure of 1900 continued	The cure of 1901 continued	The cure of 1902 continued							The cure of 1901 continued	The cure of 1902 continued					
Persons suffering from Lung Tuberculosis	1898	1899	1900	1901	1902	1898	1899	1900	1901	1902	1899	1900	1901	1902	1900	1901	1902	1901	1902
	74	74	72	77	78	68	45	38	33	31	67	48	40	35	66	49	41	71	55
Persons suffering from other Diseases	1898	1899	1900	1901	1902	1898	1899	1900	1901	1902	1898	1899	1900	1901	1902	1899	1900	1901	1902
	73	71	72	74	75	66	48	43	40	38	61	47	42	39	64	49	44	66	55

nutritious food the vast sums which they now waste on alcohol and betting, and part of the large sum which they now spend on tea and tobacco.

CAUSES OF DEATH IN GERMAN TOWNS.

A fitting close to the accounts which have now been given of a very small part of the admirable work done in Germany for the improvement of the homes and surroundings of the people is formed by the following article, from *Soziale Praxis*, of October 15, 1903, on "The Health of the People and Social Reform."

In the third quarterly part for 1903 of *Statistics of the German Empire* (Berlin: Puttkammer and Muehlbrecht) there is a report, accompanied by four plates of diagrams, on the statistics of causes of death for 25 years. The report, drawn up by Professor Mayet, is based on the publications of the Imperial Health Office and the Imperial Statistical Office, and deals with the mortality in German towns of more than 15,000 inhabitants in the years 1877 to 1901. These towns in 1877 had 7·3 million inhabitants, and in 1901 17·5 million, that is, nearly a third of the total population of the Empire. The results recorded are very satisfactory. In these German towns there died annually for every 100,000 inhabitants:—

	In the Five Years:		Proportion of No. in 1st Period to No. in 2nd Period.
	1877 to 1881.	1897 to 1901.	
From all causes	2,673·0	2,046·0	1·3
„ Small-pox	1·5	0·04	37·5
„ Abdominal Typhus, Gastric and Nervous Fevers	43·6	10·4	4·2
„ Spotted Typhus	2·6	0·06	43·3
„ Puerperal Fever	14·4	5·1	2·8
„ Measles and German Measles ...	27·6	21·3	1·3
„ Diphtheria and Quinsy	99·8	31·1	3·2
„ Acute Inflammations of Organs of Breathing	308·6	258·5	1·2
„ Consumption	357·7	218·7	1·6
„ Diseases not mentioned in this list	1,426·7	1,129·0	1·3

The report remarks, with reference to these statistics: "This diminution of mortality is the result of progress of many kinds. It is an honourable page in the history of German towns, and also in that of Medicine; but Legislation may also claim for itself a large part of the result. If the towns, by the construction of sewers, by the supply of water, by cleansing streets, by improvement of the closet-system and of methods of dealing with refuse, by supplying light and air through wide streets and green open spaces, by forming baths and play-grounds, have created better hygienic conditions, the progress of medicine and chemistry, the antiseptic and aseptic treatment of wounds, and the prevention of the spread of infectious diseases by means of disinfection, Behring's serum, an increased staff of medical men and attendants, a larger supply of sanatoria and convalescent-homes, have increased for the sick the chances of cure, and have increased also their protection from infection. Of the achievements of legislation and administration we need here only mention the vaccination-act, which did so much to cause the disappearance of small-pox; the act for insurance against sickness, the influence of which begins in 1885, and which has certainly had much to do with the diminution of mortality in towns in the three quinquennial periods, 1887—91, 1892—96, and 1897—1901; the acts for the protection of work-people; and the more careful prevention of the adulteration of food."

Very welcome, too, is the constant diminution in the number of suicides in towns. In the five years, 1877—81, there were 31 suicides, and in the five years, 1897—1901, only 24·5 suicides, per 100,000 inhabitants. "It is probable that the decrease of suicide is connected with easier conditions of employment, increasing prosperity, improved modes of living, all of which are shown to be facts by the statistics respecting incomes, capital, savings-banks, the life-insurance system, and the consumption of food.

There is, however, one very unsatisfactory feature, the group of acute bowel-complaints, including diarrhoea. From these there died, in the towns reported on, for every 100,000 inhabitants:—

In the five years 1877—81.....	264.1 persons.
„ „ „ 1882—86.....	253.1 „
„ „ „ 1887—91.....	258.2 „
„ „ „ 1892—96.....	256.6 „
„ „ „ 1897—1901.....	287.8 „

Here then we have a group of maladies to which considerably more persons have fallen victims in the last period of five years than in any one of the other periods. As very many quite young children die of some of the diseases of this group, if the proportion of births had been unusually large in the last five years, the high mortality from the diseases in question might have been accounted for by that fact. But just the contrary was the case; the proportion of children born living has fallen. We have here a real retrogression. It is a result of the much greater share which women now have in industrial life. The more women there are who work in mills, the more babies there are who are deprived of their most wholesome food, their mothers' milk. The more necessary, therefore, does it become to take all possible measures to ensure that cows' milk shall be pure and free from bacteria. And, we must add, the greater and the more comprehensive is the protection given to women in industrial life, the better will be the results for children, especially if the hours of work be shortened for women.

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